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Georgia Power Co. v. Tennessee Valley Authority, 17 F.Supp. 769 (N.D.Ga., 1937), aff'd, 89 F. (2d) 218 (C.C.A. 5th, 1937),	
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^{*} Parenthetical references following citations are to the record herein or to the appendices to this brief.

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United States v. Gratiot, 26 Fed. Cas. 12 (C.C.D.	
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		-
	Hearings on Sundry Civil Appropriation Bill, 1922, before Subcommittee of the House Committee on Appropriations, 66th Cong.,	
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67 Cong. Rec., 69th Cong., 1st sess., p. 4986	108
75 Cong. Rec., 72d Cong., 1st sess., p. 9655	31
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4 Wigmore, Evidence (2d ed., 1923) sec. 2113	235
Wilbur and Ely, The Hoover Dam Power and	
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IN THE

Supreme Court of the United States

OCTOBER TERM, 1938

No. 27

THE TENNESSEE ELECTRIC POWER COMPANY ET AL.

APPELLANTS

v.

TENNESSEE VALLEY AUTHORITY ET AL.
APPELLEES

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TENNESSEE NORTHERN DIVISION

BRIEF FOR APPELLEES TENNESSEE VALLEY AUTHORITY ET AL.

OPINION BELOW

The opinion of the district court (r. 542, app. I, 113) was filed on January 24, 1938, and is reported in 21 F.Supp. at 947.

JURISDICTION

The judgment sought to be reviewed was entered on January 25, 1938. The jurisdiction of this Court rests on section 3 of the act of August 24, 1937 (50 Stat. 751).

QUESTIONS PRESENTED

- 1. Whether the complainant utility companies have standing to challenge the construction and operation by the Tennessee Valley Authority of certain dams in the Tennessee River and its tributaries, and the transmission and sale of the electric energy created by those dams.
- 2. If the first question is answered in the affirmative, then whether the construction of certain dams in the Tennessee River and its tributaries, as authorized by the Tennessee Valley Authority Act of 1933, as amended, and various appropriation acts subsequent thereto, is valid under the Federal Constitution; and whether the transmission and sale of the electric energy acquired in the operation of dams so constructed is valid under the Federal Constitution.
- 3. Whether the trial court committed reversible error in rulings on questions of evidence and procedure.

SCOPE OF THE ISSUES

In our view the above questions are the only ones presented for decision. The constitutional power of Congress in authorizing and directing the challenged activities is not affected by evidence submitted on the diverse allegations of the bill relating to charges of coercion and duress exerted upon complainants, of conspiracy and unfair propaganda against them, of solicitation of their customers, and of unfair competition generally. Upon analysis it will appear that these

charges amount to no more than a general claim of a right to be free from competition. All these charges will, of course, be treated in the argument, *infra*, but the basic constitutional questions in the case will not be confused with these collateral issues.

It is also important to note that no substantial question of statutory authority is raised. Although want of statutory power to engage in the challenged activities is alleged in general terms in the bill (r. 64), complainants have never specified what acts are in excess of statutory authority, nor have they seriously pressed this general claim of the bill (cf. r. 289).

If any doubt existed as to the statutory authority to perform the acts challenged in this case, such doubt would be removed by reference to the extensive annual congressional hearings and the committee reports pursuant thereto, upon the basis of which the Congress has enacted the annual appropriation measures dealing with the Authority. The history of these measures reflects the detailed supervision which the Congress has exercised over the Authority. For example, not only have the appropriation acts specified the particular dams upon which work should go forward, but they have also stated whether the work should be construction or merely preliminary investigation, and they have specified the extent to which construction

Second Deficiency Appropriation Act, fiscal year 1935, 49 Stat. 571; First Deficiency Appropriation Act, fiscal year 1936, 49 Stat. 1597; Second Deficiency Appropriation Act, fiscal year 1937, 50 Stat. 213; Independent Offices Appropriation Act, fiscal year 1939, Public, No. 534, 75th Cong., 3d sess. (See app. II, 71, 76, 83, 92.)

should go forward on particular projects;² and the committee reports³ which accompanied the measures have earmarked, for the various activities, the total amounts appropriated for the Authority.

The same close supervision by the Congress over the work of the Authority is reflected in the history of the amendments to the Tennessee Valley Authority Act enacted in 1935. The Authority's report of March 31, 1936, entitled The Unified Development of the Tennessee River System (comp. ex. 328 (original), r. 3068), submitted pursuant to a provision of these amendments, served further to define for the Congress the projects of the Authority both in progress and contemplated.

Perhaps no agency of the Government has given the Congress a fuller account of its activities, nor has any other agency been the subject of such direct and continuing supervision by the Congress. In a very real sense, therefore, it must be recognized that appellants' challenge of the Tennessee Valley Authority involves but one fundamental issue—the validity of congressional action.

Second Deficiency Appropriation Act, fiscal year 1937, 50 Stat. 213 (app. II, 83).

³ H.Rept. 1261, 74th Cong., 1st sess.; H.Rept. 2591, 74th Cong., 2d sess.; H.Rept. 699, 75th Cong., 1st sess.; H.Rept. 1662, 75th Cong., 3d sess. (See app. II, 72, 77, 85, 94.)

⁴ Hearings before House Committee on Military Affairs, 74th Cong., 1st sess.; S.Rept. 453, 74th Cong., 1st sess.; H.Rept. 1372, 74th Cong., 1st sess.; H.Rept. 1846, 74th Cong., 1st sess.

STATUTES INVOLVED

The statutes involved are the Tennessee Valley Authority Act of 1933, as amended (hereafter referred to as the "act"), and the several acts making appropriations for the Tennessee Valley Authority. These statutes will be found in appendix II, separately printed.

STATEMENT OF THE CASE

A. THE PARTIES AND PROCEEDINGS BELOW

The bill of complaint was originally filed in the Chancery Court of Knox County, Tennessee, on May 29, 1936, and was removed by the defendants to the United States District Court for the Eastern District of Tennessee, Northern Division (r. 136). The appellants are fourteen⁵ privately owned corporations engaged in some phase of the business of generating, transmitting, and selling electricity as public utilities in the States of Tennessee, Mississippi, Alabama, Georgia, Kentucky, North Carolina, Virginia, and West Virginia (fdg. 1, r. 585, app. I, 1). As discussed below (see *infra* pp. 175-177), the Authority has contracts or facilities in the claimed territory of only five of these complainants, namely, the four Commonwealth and Southern com-

The bill was originally filed by nineteen complainants. One of them, however, was enjoined from maintaining this action. Georgia Power Co. v. Tennessee Valley Authority, 17 F.Supp. 769 (N.D.Ga., 1937), aff'd, 89 F. (2d) 218 (C.C.A. 5th, 1937), cert. denied, 302 U.S. 692. Three other complainants, Tennessee Public Service Company, Holston River Electric Company, and Kentucky-Tennessee Light & Power Company, have sold or arranged to sell certain of their facilities to municipalities or, in lesser degree, to the Tennessee Valley Authority, and have voluntarily withdrawn from this litigation. Memphis Power & Light Company is now negotiating the details of a similar transaction and will probably move to dismiss prior to argument.

panies and the West Tennessee Power & Light Company (fdgs. 99, 111, r. 623, 625, app. I, 54, 57). The bill joined as defendants the Tennessee Valley Authority and the individual members of its board of directors.

While the bill contained numerous allegations, many of which related to a so-called "national power policy" and an alleged "power program" of the Authority, its main claims were: (1) that the complainants were threatened with imminent destruction or serious injury from alleged competition in the sale of power by the Tennessee Valley Authority; (2) that the electric energy sold by the Authority was acquired by the construction and operation of dams unrelated to any federal function, and that to the extent that these dams were stated to be constructed for the improvement of navigation, the control of destructive floods, and the national defense, the declared purpose was "a sham and pretense" (r. 55); and (3) that even if the electric energy were lawfully acquired by the Authority, the method of disposition was in violation of the Federal Constitution. The prayer of the bill sought a sweeping injunction against the "national power policy" and "power program" of the Authority. Essentially, however, the relief sought was an injunction to restrain the Authority and its directors from constructing dams in the Tennessee River and its tributaries, from generating electric energy at the dams, and from marketing such energy in the claimed territory of the complainants (r. 67-71).

A motion to quash for want of jurisdiction (r. 139) and a motion to dismiss for misjoinder of causes and

parties and for want of a justiciable controversy (r. 156) having been overruled (r. 155, 159), defendants answered (r. 160). A preliminary injunction granted by the district court on motion of the complainants (r. 260) was reversed on appeal to the Circuit Court of Appeals for the Sixth Circuit, and the case was remanded for trial (90 F. (2d) 885; r. 267).

In accordance with section 3 of the act of Congress of August 24, 1937, Senior Circuit Judge Moorman designated Circuit Judge Allen and District Judge Martin to sit with District Judge Gore to try the case. After a complete trial, the district court, on January 21, 1938, rendered its decision upholding the constitutionality of the Tennessee Valley Authority Act and the validity of the activities pursuant thereto challenged in the bill (r. 542, app. I, 113). The decision was unanimous.

Appellants have devoted a considerable portion of their brief to the claim that they were denied a fair trial by the rulings of the court below on the admission of evidence and on matters of procedure. The particular rulings of the court upon which this claim is based

On appeal from the order of injunction the defendants requested the Circuit Court of Appeals not only to dissolve the injunction but also to dismiss the bill upon the grounds urged in the motion to quash and the motion to dismiss which had been overruled by the district court. The Circuit Court of Appeals, however, sustained the district court's rulings on these motions (r. 267), Judge Moorman dissenting on the ground that the bill should have been dismissed for lack of a justiciable controversy (r. 284). Defendants' petition for writ of certiorari to review the Circuit Court of Appeals' rulings insofar as t'ey affirmed the district court's orders was denied (301 U.S. 710).

are discussed in detail in a separate section of this brief (infra pp. 192-260). In view of the appellants' effort to create a general impression of an atmosphere of prejudice and unfairness in the conduct of the trial, however, it seems in order to give a general description of the prior proceedings at this point.

At the time the case came on for final hearing, it had been in litigation for a year and a half. The several motions were extensively briefed and argued. At the hearing before the district court on the motion for preliminary injunction, scores of affidavits were presented and all of the questions of fact and issues of law were elaborately briefed and argued. This was necessarily true since the application for preliminary injunction depended upon the determination of whether the complainants had made a reasonable showing of probability of ultimate success on the merits. Again, on appeal to the Circuit Court of Appeals for the Sixth Circuit, the same questions of fact and of law were covered by the briefs and argument of counsel. An application for writ of certiorari was made to this Court and denied (301 U.S. 710). Several procedural motions calling attention to the scope of the issues immediately preceded the trial (r. 156, 263, 264, 288, 327).

It is thus apparent that by the time the cause was ready for final hearing, counsel were thoroughly familiar with the opposing theories and contentions, and no element of surprise was possible. The trial itself commenced on November 15, 1937, and closed on January 15, 1938. The presentation of testimony and

arguments of counsel upon rulings at the trial consumed approximately seven weeks of court time. Eighty-two witnesses testified on behalf of complainants and 957 exhibits were introduced. The presentation of their testimony consumed four and a half weeks of court time and occupied approximately 3,590 pages of the typewritten transcript, exclusive of exhibits. Fifteen witnesses testified for the Government. One hundred fifty-eight exhibits were introduced, two and a half weeks of court time were consumed in the presentation of the defenses, and the defense proof covered approximately 2,540 pages of the typewritten transcript, exclusive of exhibits. In addition to the court time consumed, extensive additional evidence on behalf of complainants was covered by long stipulations prepared outside of court and by depositions taken, in advance of trial, in Alabama, Georgia, Tennessee, and the District of Columbia.

Throughout the trial the court heard extensive arguments and received numerous briefs filed by both parties regarding the admissibility of evidence. Argument was heard and briefs were filed on every important ruling. Complainants filed seventeen lengthy briefs during the trial, defendants twelve. The record shows that the court gave these briefs careful study and attention (r. 1492). Weeks of advance notice were given as to the closing argument and the presentation of findings (r. 1861-1862, 1919). Argument began on the day after the conclusion of testimony.

On January 24, 1938, the trial court entered an order making findings of fact pursuant to Equity Rule 70½ (r. 566, 583-584). The findings are reprinted for this Court's convenience in appendix I hereto, separately printed, together with citations to the supporting evidence in the record. The decision and the opinion of the trial court were unanimous. The entire court joined in 205 of the findings and Judge Gore concurred with modifications in seventeen others, rejecting less than thirty (r. 664-669). In addition, in its opinion filed the same day upholding the constitutionality of the Tennessee Valley Authority Act (r. 542, app. I, 113), the court analyzed the record in detail and set forth the facts in regard to material questions in the case.

Each of the findings is supported by substantial evidence in the record, as will appear from an examination of the record references cited in support thereof in appendix I hereto. They were entered only after careful consideration of all the evidence. The extensive evidence was studied and sifted by the entire court in daily conferences throughout the period of the trial (r. 2439). As an aid to the court, counsel were advised and requested, prior to the Christmas recess, to submit suggested findings of fact, together with all supporting record references, on the day of the final argument, then set for January 15, 1938 (r. 1861-1862, 1919, 2281-2284, 2370, 2439, 398, 477). Nine days after the close of the final arguments, the trial court, consistently with its decision, adopted many of the findings requested by the Government and a considerable number requested by complainants (r. 566). In addition, Judge Gore stated his "opinion" that there "should also be adopted" other findings as suggested by the complainants (r. 669). These are repeatedly cited by appellants as "Additional Findings," despite the fact that they were rejected by the trial court (r. 567).

The appellants have attacked all the contested findings of the court below without argument and by mere assertions that the trial court's findings are either unsupported by the evidence or contrary to the great weight of the evidence. (See, e.g., br. 20, 21, 38 (n. 1), 60 (n. 1).) Appellants choose to ignore all of the evidence in support of the findings, disregarding the elementary, principle that the findings of the trial court will not be set aside by this Court whenever supported by any substantial evidence (Alabama Power Co. v. Iokes, 302 U.S. 464). The only "findings" which appellants cite on contested issues are the so-called "additional findings" which were suggested by Judge Gore. In the same spirit, appellants rely indiscriminately on both admitted and excluded evidence throughout their brief.

In the statement which follows, all statements of fact are supported by references to the findings of the court and to evidence in this record. Where findings are referred to they are the findings of the court and not the individual views of one judge. Where evidence is cited the reference is to testimony or exhibits admitted in evidence and not to material excluded by the court.

B. THE BASIC FACTS

The Tennessee Valley Authority Act contemplates a coordinated project for the combined purposes of creating and maintaining a nine-foot navigable waterway throughout the 650-mile length of the Tennessee River, the promotion of navigation on the Tennessee and its tributaries, the control of destructive floodwaters in both the Tennessee and the Mississippi River basins, and the improvement of the Wilson Dam properties in the interest of national defense (sec. 1, app. II, 1). Each of these functions has a background which illuminates the purposes and provisions of the act. Before recounting that background and describing the projects of the Authority in relation thereto, it should be pointed out that the nature of the navigation and flood-control problems concerning the Tennessee River system and the character of these projects as navigation and flood-control structures in design and operation were the subject of extensive testimony by experts uniquely qualified.

The witnesses for the Authority included Colonel Lewis H. Watkins, of the Corps of Engineers of the Army, who was the district engineer in charge of the studies of the Tennessee River system published in House Document No. 328, 71st Congress, 2d session (comp. ex. 105 (original), r. 2615; r. 1534-1536), hereinafter referred to as House Document No. 328, concerning which the Chief of Engineers said, "there has never been presented to Congress a more thorough and exhaustive study" (r. 1634);

George R. Clemens, senior engineer of the Mississippi River Commission, who was in charge of the preparation of the Comprehensive Report on Reservoirs in the Mississippi River Basin, published in 1936 as House Document No. 259, 74th Congress, 1st session (def. ex. 32 (original), r. 4062), made pursuant to section 10 of the Flood Control Act of 1928 (r. 1646-1647); Edward H. Sargent, chief engineer of the Hudson River Regulating District, who is in charge of the operations of the Sacandaga Reservoir, an outstanding multiple-use dam successfully operated for flood control and power (r. 1673-1679); O. N. Floyd, consulting engineer for the Army Engineers on a number of flood-control projects having relation to the lower Mississippi (r. 1887-1890); James S. Brodie, chief engineer and superintendent of maintenance of the Federal Barge Lines, the operating agency of the Inland Waterways Corporation, who is an expert on the practical aspects of inland waterway navigation (r. 2021-2023); Sherman M. Woodward, chief of the Authority's water-control division and in charge of the planning and operations of the Authority's projects, a distinguished hydraulic engineer of forty years' experience in teaching and practice (r. 1772-1775).

In addition, testimony was given by a number of the Authority's engineers who were particularly qualified to explain the studies undertaken in relation to navigation and flood control and the design and operation of the projects: J. S. Bowman, at one time construction engineer with the Miami Conservancy District, Dayton, Ohio, now head project-planning engineer for the Authority (r. 1689-1690); J. H. Kimball, at one time assistant chief engineer with the Miami Conservancy District and later associated with Metcalf & Eddy, Boston, who is now in charge of the flood-control section of the planning department of the Authority (r. 1822-1823); and C. T. Barker, for eight years engaged by the Army Engineers, four years of which were spent in studying all aspects of navigation on the Tennessee and its tributaries and preparing data for the report in House Document No. 328, now engineer in charge of the navigation section of the Authority (r. 1940-1941).

1. THE PROBLEM OF IMPROVING NAVIGATION ON THE TENNES-SEE RIVER AND CONTROLLING DESTRUCTIVE FLOODS IN THE TENNESSEE AND MISSISSIPPI RIVER BASINS

Navigation: The Tennessee River, a navigable river approximately 652 miles long, is formed by the junction of the French Broad River and the Holston River at Knoxville, Tennessee, and enters the Ohio River near Paducah, Kentucky. In its unimproved state there were numerous obstacles to commercial navigation, including shoals and bars, steep slopes, high velocities, and floods in many months of the year, and inadequate depths in a great portion of the river (fdg. 48, r. 609, app. I, 32).

The improvement of navigation on the Tennessee River, as this Court observed in the Ashwander case, has been a matter of national concern for over a century (Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 328). It was there pointed out and has been

found herein that from 1852 Congress had repeatedly authorized projects to develop navigation on all portions of the river, both by open-channel improvements and by canalization (297 U.S. at 329; fdg. 49, r. 609, app. I, 32). From 1852 to 1933 Congress had expended on these surveys and projects approximately eighteen million dollars, exclusive of the amounts expended for Wilson Dam (fdg. 49, r. 609, app. I, 32).

Despite the unsatisfactory condition of its improvement, the traffic on the river over the last 40 years has varied between one and two million tons annually, necessarily confined in the main to short hauls over the improved sections (fdg. 56, r. 611, app. I, 36). It was estimated by the district engineer in House Document No. 328 that the improvement on the Tennessee for modern commercial navigation would result in transportation savings of approximately ten million dollars annually (H.Doc. 328, supra, comp. ex. 105 (original) pp. 496-497, r. 2615, 4274-4275), and this estimate was confirmed by his testimony in the present case (Watkins, r. 1551-1556). Subsequent studies by the Authority, as the court found, have shown this estimate to be reasonable and conservative (fdg. 56, r. 611, app. I, 36).

The importance of this navigation improvement to the national commerce is evident from the following facts as found by the trial court:

The Tennessee River, as a tributary of the Ohio River, is interconnected with the inland waterway system of the Mississippi River, which connects the Gulf and the Great Lakes and taps the territory of about 15 States, including many important

traffic-producing industrial, commercial, and agricultural centers, and extends as far east as Pittsburgh, Pennsylvania, as far west as Kansas City. Missouri, and as far north as Minneapolis and St. Paul. Minnesota. Interstate railroads and highways interconnect with the waterway at numerous points, permitting joint land and water transportation. There are varied and substantial agricultural, mineral, and forest resources located in the Tennessee Valley within reach of the waterway. About 18.2% of the population of the United States, based on the 1930 census, is located within 25 miles of the banks of this interconnected waterwav. This inland waterway system includes 5,700 miles of improved waterway of 9-foot depth or over, an additional 3,200 miles of 6- to 9-foot depth, and an additional 1,000 miles of 4- to 6-foot depth [fdg. 51, r. 610, app. I, 33; see def. exs. 116, 118, 119, 120, 121, 122, 123, 125 in Reproductions of Certain Original Exhibits Submitted by Appellees].

At the date of the passage of the Tennessee Valley Authority Act, however, the river had not been adequately improved for modern commercial navigation except for a few short stretches, the controlling depth at that time ranging from four and a half feet in the lower part of the river to one foot in the upper section (fdg. 50, r. 609, app. I, 32). The Tennessee River can be improved for modern nine-foot navigation by means of a series of seven high dams, or a system of thirty-two low dams, or a combination of the two. The lower 200-mile (and controlling) stretch of the river can also be improved to the same depth by means of

low-water releases in the dry season from storage projects (fdg. 71, r. 616, app. I, 44; Putnam, r. 2312-2313), an important fact overlooked by appellants in their attack on the Authority's tributary projects.

Flood control: The court below found, and indeed judicial notice could be taken of the fact, that the recurrent great floods on the Tennessee and Mississippi Rivers have long presented a grave flood menace of national importance:

Thousands of miles of interstate railways and highways, and 20,000,000 acres of the richest cotton lands in the United States, the products of which are normally marketed in interstate and foreign commerce, lie within the flood plain of the Mississippi Valley. Located in the path of Mississippi floods also are the important commercial cities of Memphis, Cairo, and New Orleans, and other smaller communities, in which are located large cotton warehousing, compressing, and processing plants, and woodworking plants, engaged in the production, processing, and distribution of goods normally marketed in interstate and foreign commerce [fdg. 58, r. 612, app. I, 37].

The principal point of danger on the Tennessee River is the city of Chattanooga (def. exs. 72, 73, 81 in Reproductions of Certain Original Exhibits Submitted by Appellees), which is an important center of interstate railways and highways and a principal distributing center throughout the Southeast for commodities produced in other States (fdg. 58, r. 612, app. I, 37; def. ex. 66 in Reproductions of Certain Original

Exhibits Submitted by Appellees). The estimated annual damage of a tangible character caused by past floods to property at and above Chattanooga is \$1,-356,063 (fdg. 84, r. 619, app. I, 49). This amount does not include losses due to interruption of business and to disease and death and various other losses of an intangible character (Kimball, r. 1833-1834; Kurtz, r. 1230). Appellants take the average annual amount of physical damage to property along the Tennessee River alone and capitalize it to secure what is asserted to be the maximum amount of expenditure permissible for Tennessee flood control, on the ground that it is a "fundamental principle" that expenditures for flood-control structures may not exceed the capitalized value of the flood damages eliminated by those structures (br. 126-127). Without pausing unduly to inquire as to the constitutional source of this "fundamental principle," it should at least be pointed out that the figures employed ignore completely the more important losses due to interruption of business. deterioration, dispossession, insecurity, disease, and death, and, of course, wholly ignore the great losses from Mississippi floods.

In order to provide effective flood control on the Tennessee River, it is necessary to construct reservoirs to reduce maximum flood heights sufficiently to make feasible the construction of local protection works. There is no dispute between the parties on this point (Kurtz, r. 1208-1209; comp. ex. 328 (original)

p. 19, r. 3068). For most effective flood control on the Tennessee it is desirable to provide high dams with controlled storage on the main stream and on the tributaries (fdg. 60, r. 613, app. I, 38).

The gravity of the flood problem in the Mississippi Valley is too well known to require elaboration. Tennessee River has always been a substantial factor in Mississippi River floods (fdg. 61, r. 613, app. I, 39). The Ohio River and its tributaries, of which the Tennessee is the largest, are the greatest contributors to such floods, accounting for from 52% to 90% of the total flood flows between Cairo, Illinois, and Helena, Arkansas (ibid.). Because it is the largest tributary of the Ohio and its mouth is closer to Cairo and the lower Mississippi than any other major tributary of the Ohio system, the Tennessee is one of the best rivers upon which to construct reservoirs for the reduction of floods on the lower Mississippi (fdg. 63, r. 613, app. I, 40). All of these facts were substantially conceded by the appellants' witness Kelly, who qualified as their expert on Mississippi flood control (r. 1381-1383).

The value of reservoirs for Mississippi flood control has been recognized for the better part of a century. In the past, however, the Army Engineers had hesitated to recommend proposals for flood-control reservoirs on the ground that construction of reservoirs for flood control alone would involve a prohibitive cost and would preëmpt the sites necessary for the development of the rivers for other economic uses. See Final Re-

port of National Waterways Commission, S.Doc. 469, 62d Cong., 2d sess., pp. 135, 185.

It is now recognized that the present levee system on the Mississippi, supplemented by floodways and cut-offs, is inadequate to pass a flood which is reasonably probable without disastrous overtopping of the levees (fdg. 62, r. 613, app. I, 39). The levees on the lower Mississippi have reached the practical limits of height (ibid.). Additional protection must include the construction of reservoirs on the tributaries of the Mississippi (ibid.). Not only are these the facts found by the court and established by the testimony of George R. Clemens, senior engineer for the Mississippi River Commission, unquestionably the best-informed witness on the present flood situation in the Mississippi Valley to appear in this case (r. 1646), but they are also identical with the conclusions reached by the Chief of Engineers of the United States Army after the disastrous floods of 1937 (fdg. 67, r. 614, app. I, 41). This report states that the existing levee system was designed to pass a flood of only 2,250,000 c.f.s. at Cairo, and concludes:

A review of all data indicates, however, that due prudence should provide for a flood which without reservoir control would reach 2,600,000 cubic feet per second in the Mississippi between Cairo and the Arkansas. . . .

It was partly on these grounds that the Reservoir Board for Mississippi Flood Control of 1927 recommended against reservoirs for Mississippi flood control. Com. Doc. 2, H.R.Com. on Flood Control, 70th Cong., 1st sess. These considerations explain why so few flood-control reservoirs have been built in this country notwithstanding the great need for them in many sections. (See app. II, 106.)

See also H.Doc. 259, supra, def. ex. 32 (original) pp. 6-7, r. 4062.

The present levees on the Mississippi are about as high as it is desirable to construct them. An increase in the height accentuates the danger of a crevasse and its consequences, besides presenting a serious hazard of subsidence in the soft ground which they must occasionally cross. Additional safety should be sought rather in the continuation of the program for improving the flood discharge capacity of the river channel, and in reducing peak discharge by the construction of reservoirs [Com. Doc. 1, H.R.Com. on Flood Control, 75th Cong., 1st sess., p. 6].

These facts are confirmed by the testimony of appellants' own expert, Colonel Kelly (r. 1379-1382). In the face of this record appellants make the flat statement, on page 58 of their brief, that the existing levee system "will be sufficient to control the maximum flood to be anticipated on the Mississippi River" and cite in support thereof a so-called "additional finding."

That the best sites for flood-control reservoirs for the protection of the Mississippi are located on the lower tributaries of the Ohio, including the Tennessee, was explicitly recognized in the comprehensive reports of the Army Engineers set forth in House Document No. 306, 74th Congress, 1st session, page 127 (r. 1382). This view was fully confirmed by the testimony of the experts Clemens, Kimball, Floyd, and Kelly (r. 1650, 1825-1826, 1891, 1381-1382), and was adopted by the trial court in its findings (fdg. 63, r. 613, app. I, 40).

A similar recommendation was made by the Mississippi River Commission, a body created by Con-

gress in 1879 and charged continuously thereafter with the duty of making recommendations for Mississippi River flood control. That Commission, in a comprehensive report to Congress, recommended that the Federal Government adopt a policy of encouraging the construction of reservoirs on the tributaries of the Mississippi for increased flood protection on the lower Mississippi (H.Doc. 259, supra, def. ex. 32 (original) p. 33, r. 4062; fdg. 67, r. 614, app. I, 41). The projects suggested in the report as "best suited for control of Mississippi River floods," included ten million acre-feet of storage located on the main stream of the Tennessee and on its tributaries, including the Clinch and Hiwassee Rivers (ibid.; r. 1384-1386). This recommendation was confirmed in detail by the witness Clemens, senior engineer of the Commission (r. 1647-1652).

2. RECOMMENDATIONS AND PRIOR EFFORTS TO SECURE A CO-ORDINATED DEVELOPMENT OF THE WATER RESOURCES OF THE TENNESSEE RIVER IN THE INTEREST OF NAVIGATION AND FLOOD CONTROL

The problems of navigation improvement and flood control discussed above received intensive study by the Army Engineers and by Congress. In 1925 Congress directed the Secretary of War to prepare and submit to it estimates of the cost of detailed surveys of the navigable streams of the United States and their tributaries. The surveys contemplated were such as

... may be required of those navigable streams of the United States, and their tributaries, whereon power development appears feasible and pracplans for the most effective improvement of such streams for the purposes of navigation and the prosecution of such improvement in combination with the most efficient development of the potential water power, the control of floods, and the needs of irrigation . . [43 Stat. 1186, 1190; app. appellants' br., 35].

The obvious purpose was to provide for surveys in which all possible methods of conserving and utilizing all of the resources of the navigable rivers of the United States would be considered, to the end that plans might be devised under which all such resources would be conserved instead of wasted. As stated by appellants, a report published as House Document No. 308, 69th Congress, 1st session, was made pursuant to the provisions of this statute. This report outlined a plan for making the surveys contemplated by the original statute, and those surveys shortly thereafter were authorized by the act of January 21, 1927 (44 Stat. 1010; see app. appellants' br., 35).

The survey of the Tennessee River, begun in 1922 (r. 1534) and continued pursuant to this authority, was completed in 1930 after five years of investigation, and the results were embodied in a report published as House Document No. 328, supra (comp. ex. 105 (original) pp. 1, 27-30, r. 2615). The report

Throughout this brief, emphasis supplied unless otherwise indicated.

See app. II, 98-112. For a more extensive collection of historical materials on this subject, see Fly, The Role of the Federal Government in the Conservation and Utilization of Water Resources, 86 Pa.L.Rev. 274.

described a number of possible systems of structures for the Tennessee River, some of them capable of improving the river for navigation alone, others designed for flood control, and others for navigation improvement, flood control, and the conservation of water power. It was possible, the report showed, to secure a measure of navigation improvement by means of releases from storage reservoirs: a continuous ninefoot channel on the main stream could be secured through a series of thirty-two low movable-wicket dams; and a superior waterway could be secured through a series of seven high dams (H.Doc. 328, supra, comp. ex. 105 (original) pp. 11-13, r. 4272). The high-dam system would be more costly, but its superiority even for navigation alone was recognized in the report by the Board of Engineers for Rivers and Harbors, as the court below found (fdg. 54, r. 610, app. 1, 34; comp. ex. 105 (original) pp. 11-13, r. 4272). The superiority of the high-dam system even for navigation alone was confirmed in detail at the trial by the testimony of Colonel Watkins, the district engineer in charge of the survey (r. 1536-1539, 1556, 1581-1582); of Barker, engaged for four years in studying navigation problems for the survey (r. 1958-1973); and of Brodie, chief engineer of the Federal Barge Lines (r. 2024-2031). The superiorities are summarized in finding 54 (r. 610, app. I, 34)—superior channel depths and widths; substantially fewer lockages; substantially less current

velocity; smaller pool fluctuations; less interruption from floods.11

But apart from the advantages for navigation alone, the salient fact is that the high-dam system provided substantial flood control for the Tennessee, while the low-dam system did not. This point is clearly made in the report and is not subject to dispute (comp. ex. 105 (original) pp. 64, 100, r. 4274; fdg. 70, r. 616, app. I, 44). The testimony of Colonel Watkins leaves no doubt that of the two systems the high-dam project was regarded as far preferable from every standpoint except that of original cost (r. 1536-1539, 1581-1582, 1620).

The report itself states, referring to the low-dam project:

The district engineer does not think that such a project should be built. However, he uses the cost of such a project as a measure of the benefits to navigation which are secured by the construction of the high dams and locks, and considers that a series of low dams might be adopted as an alternative in any section of the river on which, for some reason, the construction of a high dam was found to be impracticable at the present time [comp. ex. 105 (original) pp. 4-5 (par. 16)].

And again:

It is possible to provide a 9-foot waterway by means of low-lift dams, but such a waterway would

The attempt of appellants to suggest offsetting disadvantages is renewed in this Court (br. 20-26), apparently in the view that the findings and the testimony of the best-qualified experts will be disregarded. Appellants' suggestions are answered more fully in the argument, infra pp. 76-77.

be inferior to the high-dam developments and would not permit the economical development of power [id., pp. 12-13 (par. 13), r. 4272].

The final recommendation in the report was stated thus:

It is recommended that the general plan proposed for the combined development of the Tennessee River and its tributaries for navigation, power, and flood control be adopted as a general guide, subject to such modifications as may be found necessary and approved by the Chief of Engineers and Secretary of War, for navigation and flood control on the Tennessee River and its tributaries . . . [id., pp. 100-101 (par. 80)].

It was concluded, on the basis of fiscal considerations, that a plan should be adopted providing for the creation of a nine-foot navigable channel throughout the length of the Tennessee River by a series of low movable-wicket dams to be constructed at the sole expense of the Federal Government or by a series of fixed high dams to be constructed by cooperation between private interests and the Federal Government. This recommendation was adopted in the Rivers and Harbors Act of 1930 (46 Stat. 918; app. appellants' br., 36).

The alternative plans thus embodied in the act of 1930 have been treated at some length because of the emphasis placed in appellants' brief on the low-dam alternative system, as if it were the ultima thule of engineering and constitutional endeavor on the part of the Federal Government. Nothing could be more misleading. "The Federal Navigation Project," as ap-

pellants term it, is little more than a slogan coined by appellants, with the aid of the definite article and capital letters, to describe what was in fact a hypothetical alternative method of improving the Tennessee River for navigation alone, which would preëmpt 32 sites on the main stream and would concededly provide an inferior waterway and no flood control. Appellants, in a remarkable statement, lament that these nonexistent "dams" will be "flooded out and destroyed" (br. 106-107). The hypothetical character of the lowdam alternative and the preference of the Army Engineers for the high-dam plan are demonstrated by the fact that, prior to the enactment of the Tennessee Valley Authority Act, the Army Engineers had already begun construction of a lock for a high dam at the site of the present Wheeler Dam, with provision for subsequent installation of power facilities (fdg. 41, r. 604, app. I, 25; Bowman, r. 1762-1766; Putnam, r. 1172-1173; Crane, r. 1285).

Prior to the act of 1930 and following the great Mississippi flood of 1927, Congress had passed a comprehensive act for further investigation of flood-control measures for the Mississippi basin (act of May 15, 1928, 45 Stat. 534). Section 10 of that act directed the Secretary of War, through the Corps of Engineers, to prepare reports on a number of relevant topics, including

... the effect on the subject of further flood control of the lower Mississippi River to be attained through the control of the flood waters in the drainage basins of the tributaries by the establishment of a reservoir system . . . [p. 538].

Intensive investigation of the subject was undertaken for the Chief of Engineers by the Mississippi River Commission, the studies being under the direction of the witness Clemens (r. 1647-1648). The report of the Commission recommended a series of reservoirs on tributaries of the Mississippi, including some 10,000,000 acre-feet of storage on the Tennessee system (Clemens, r. 1649; H.Doc. 259, supra, def. ex. 32 (original) pp. 33, 46, r. 4062). The subsequent recognition by the Chief of Engineers of the need for tributary reservoirs to reduce Mississippi floods has already been pointed out (see p. 20, supra).

The act of 1930, as has been observed, contemplated the possibility of cooperation between private interests and the Federal Government in the construction of the high dams on the Tennessee. Accordingly, the district engineer and the division engineer approached all the power companies that might be interested in the project. These efforts met with failure, as the district engineer testified (Watkins, r. 1541-1542). It is true, as appellants state (br. 9-10), that some of the companies acquired property holdings that enabled them to control certain of the tentative dam sites, but in the face of failure to begin construction, the acquisition of strategic sites can hardly have been regarded as

The Commission's report set forth two plans, one primarily for Mississippi flood control and the other primarily for local flood control and secondarily for Mississippi flood control. The Commission recommended the second as a general plan (def. ex. 32 (original) p. 33, r. 4062), but, as Clemens testified, it was found practicable to combine both on the Tennessee (see Clemens, r. 1656-1657).

helpful in developing the river. The vice president of appellant The Tennessee Electric Power Company, a witness in this case, frankly admitted in testimony before a House committee in 1933 that "either the Government has to develop the Tennessee River, or it won't be developed at all" (r. 974).

The court found that neither at the time of the enactment of the Tennessee Valley Authority Act nor since that time has there been any reasonable prospect that a comprehensive development of the Tennessee River and its tributaries for the combined purposes of navigation and flood control in the Tennessee and Mississippi River basins could be obtained except by the construction of high dams by the United States or an agency thereof (fdg. 67, r. 614, app. I, 41; see H.Doc. 131, 72d Cong., 1st sess.).

2. THE PROBLEM OF IMPROVING THE USEFULNESS OF WILSON DAM

Even apart from the unified project for the development of the river, two of the dams—Wheeler on the main stream and Norris on the Clinch River—were long recognized to be particularly desirable as auxiliary to Wilson Dam.

In the hearings on the appropriation for the completion of Wilson Dam in 1922, and subsequently, the importance of Wheeler Dam, or Dam Numbered 3 as it was then designated, was emphasized in relation to the completion of the improvement of the 37 miles comprising Muscle Shoals.¹³

The value of Norris Dam, or Cove Creek Dam as it had "by long custom become known and designated." for purposes of augmenting and regulating the stream flow at Wilson Dam was similarly recognized and is reflected in sections 17 and 18 of the Tennessee Valley Authority Act (app. II, 23-25). The construction of Wilson Dam, as established by the Ashwander case, was undertaken in part pursuant to the war powers of Congress, and the dam as completed constitutes a valuable national-defense asset and lawfully owned property of the United States. Wilson Dam was equipped with eight generating units with a total capacity of 184,000 kw (fdg. 43, r. 605, 607, app. I, 27, 29). At the time of its construction the stream flow at Wilson Dam. without the aid of stream-flow regulation, was sufficient to utilize only a small portion of the generating capacity originally installed for firm-power production. Yet emplacements were provided for ten additional generating units which would provide an additional generating capacity of 260,000 kw (ibid.). It was evident that increased stream flow through the release of stored waters on the upper reaches of the river during low-water season was essential if the usefulness of Wilson Dam as originally planned was to be achieved. It was essential that the large amount of secondary power

Hearings on Sundry Civil Appropriation Bill, 1922, before Sub-committee of the House Committee on Appropriation.3, 66th Cong., 3d sess., pp. 14-18, 78-81; Hearings before the House Committee on Military Affairs, 70th Cong., 1st sess., p. 90; S.Rept. 831, 67th Cong., 2d sess. (pt. 2) pp. 14-15.

available at Wilson Dam be converted into more usable firm power by increasing and regulating the stream flow (fdg. 89, r. 620, app. I, 50). In addition, the special importance of Norris, or Cove Creek, Dam as a flood-control and navigation measure was emphasized both in the act (sec. 18, app. II, 24) and in the early consideration given the project. President Hoover, although returning without his approval a bill providing for Government operation of the Muscle Shoals properties, recommended the construction by the United States of Cove Creek Dam (S.Doc. 321, 71st Cong., 3d sess., p. 8). It is this dam that appellants have singled out for special attack (br. 38-40).

4. THE TENNESSEE VALLEY AUTHORITY ACT: ITS PURPOSES AND RELEVANT PROVISIONS

In 1933 the Tennessee River was still unimproved for large-scale commercial navigation. The problem of the uncontrolled floodwaters of the Tennessee River and its tributaries was till unsolved. The potential benefits of the Government-owned Wilson Dam and the Muscle Shoals properties were largely unrealized. There was no prospect that private interests would undertake the development of the river for any purpose. In these circumstances, Congress enacted the Tennessee Valley Authority Act. Its purposes are clearly set forth in section 1:

S.Rept. 831, 67th Cong., 2d sess. (pt. 1) pp. 33-34; S.Rept. 19, 71st Cong., 1st sess., pp. 10-12; S.Doc. 21, 72d Cong., 1st sess., p. 5; S.Rept. 23, 73d Cong., 1st sess., p. 1; H.Rept. 48, 73d Cong., 1st sess., p. 8; 75 Cong. Rec., 72d Cong., 1st sess., p. 9655; 77 Cong. Rec., 73d Cong., 1st sess., pp. 2276, 2283, 2663. The Senate Committee Report on the Tennessee Valley Authority Act of 1933 refers to the building of "Cove Creek Dam, mainly a flood-control and navigation proposition" (see app. II, 35).

That for the purpose of maintaining and operating the properties now owned by the United States in the vicinity of Muscle Shoals, Alabama, in the interest of the national defense and for agricultural and industrial development, and to improve navigation in the Tennessee River and to control the destructive flood waters in the Tennessee River and Mississippi River Basins, there is hereby created a body corporate by the name of the "Tennessee Valley Authority" (hereinafter referred to as the "Corporation") [app. II, 1].

The same principles are repeated in section 4 (j), which deals specifically with authority for the construction of dams:

Sec. 4. Except as otherwise specifically provided in this Act, the Corporation—

(i) Shall have power to construct such dams, and reservoirs, in the Tennessee River and its tributaries, as in conjunction with Wilson Dam, and Norris, Wheeler, and Pickwick Landing Dams, now under construction, will provide a nine-foot channel in the said river and maintain a water supply for the same, from Knoxville to its mouth, and will best serve to promote navigation on the Tennessee River and its tributaries and control destructive flood waters in the Tennessee and Mississippi River drainage basins; and shall have power to acquire or construct power houses, power structures, transmission lines, navigation projects, and incidental works in the Tennessee River and its tributaries, and to unite the various power installations into one or more systems by transmission lines. The directors of the Authority are hereby directed to report to Congress their recommendations not later than April 1, 1936, for the unified development of the Tennessee River system [app. II, 4-6].

The basic purposes are reiterated in section 23, which governs recommendations for future legislation:

Sec. 23. The President shall, from time to time, as the work provided for in the preceding section progresses [sec. 22, providing for making surveys and plans], recommend to Congress such legislation as he deems proper to carry out the general purposes stated in said section, and for the especial purpose of bringing about in said Tennessee drainage basin and adjoining territory in conformity with said general purposes (1) the maximum amount of flood control; (2) the maximum development of said Tennessee River for navigation purposes; (3) the maximum generation of electric power consistent with flood control and navigation; (4) the proper use of marginal lands: (5) the proper method of reforestation of all lands in said drainage basin suitable for reforestation: and (6) the economic and social well-being of the people living in said river basin [app. II. 27].

In addition to the power to construct dams under section 4 (j), each project has been authorized by name in the several appropriation laws dealing with the Authority. 15 Norris Dam (formerly designated as

See Second Deficiency Appropriation Act, fiscal year 1935, 49 Stat. 571; First Deficiency Appropriation Act, fiscal year 1936, 49 Stat. 1597; Second Deficiency Appropriation Act, fiscal year 1937, 50 Stat. 213; Independent Offices Appropriation Act, fiscal year 1939, Public, No. 534, 75th Cong., 3d sess. (See app. II, 71, 76, 83, 92.)

Cove Creek Dam) was also authorized by sections 17 and 18 of the Tennessee Valley Authority Act. These provisions, authorizing that dam as part of the Authority's navigation and flood-control project, recognized also its special usefulness in improving Wilson Dam for national defense.

Appellants assert that the statute authorizes the Authority to develop all of the potential power resources of the Tennessee River and its tributaries, including the hypothetical series of purely power dams located on remote tributaries which were mentioned in House Document No. 328. This is a gross misconstruction of the statute. Section 4 (j), which contains the affirmative grant of power to construct dams, limits that power to

River and its tributaries, as . . . will provide a nine-foot channel in the said river and maintain a water supply for the same, from Knoxville to its mouth, and will best serve to promote navigation on the Tennessee River and its tributaries and control destructive flood waters in the Tennessee and Mississippi River drainage basins . . . [app. II, 5-6].

By this language Congress has set up the legislative standard by which every dam proposed for construction must be measured. No dam can be constructed unless it will promote navigation or assist in the control of destructive floods on the Tennessee and Mississippi Rivers. It is established on this record that the number of sites upon which dams

meeting these specifications could be constructed is strictly limited (fdg. 93, r. 621, app. I, 51; Bowman, r. 2235). While House Document No. 328 refers to 149 potential sites on the Tennessee River system, Colonel Watkins, the district engineer, testified that in addition to the seven high dams on the main stream of the Tennessee, the only projects considered for navigation and flood control were a limited number of storage projects on the major tributaries similar to those under construction by the Authority (r. 1579-1580).

Specific directions to the Authority for the operation of its dams are contained in section 9a:

Sec. 9a. The Board is hereby directed in the operation of any dam or reservoir in its possession and control to regulate the stream flow primarily for the purposes of promoting navigation and controlling floods. So far as may be consistent with such purposes, the Board is authorized to provide and operate facilities for the generation of electric energy at any such dam for the use of the Corporation and for the use of the United States or any agency thereof, and the Board is further authorized, whenever an opportunity is afforded, to provide and operate facilities for the generation of electric energy in order to avoid the waste of water power, to transmit and market such power as in this act provided, and thereby, so far as may be practicable, to assist in liquidating the cost or aid in the maintenance of the projects of the Authority [app. II, 13].

Subject to the express limitations set forth in sections 4 (j) and 9a, the act authorizes the sale and transmission of surplus power according to the terms of sections 10, 11, and 12 (app. II, 13-17). The pertinent provisions of these sections are discussed infra. page 106 et seq., in connection with the method of disposal of the power. There is no disposition to minimize these provisions. The availability of substantial amounts of power as a result of construction and operation of the high-dam projects is an important factor bearing on the economic soundness of the undertaking and was undoubtedly given appropriate weight in the determination of Congress to authorize the undertaking. But the fact that the Congress made adequate provision for the disposition of this power in no way reflects upon the purposes for which the dams were authorized.

5. THE PROJECTS OF THE AUTHORITY: THEIR LOCATION, DE-SIGN, AND ORDER OF CONSTRUCTION

Pursuant to the statute and the appropriation acts of Congress (supra pp. 31-34) the Authority has constructed, is constructing, and has recommended for construction, to serve the purposes prescribed in the statute, a series of seven high dams on the main stream of the Tennessee and two reservoir dams on two of the principal tributaries, the Clinch and Hiwassee Rivers (fdg. 40, r. 603, app. I, 23).

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The dams completed are:

Norris Dam, on the Clinch River Wheeler Dam, on the main stream The dams under construction are:

Gilbertsville Dam¹⁶
Pickwick Landing Dam
Chickamauga Dam
Guntersville Dam
all on the main stream, and
Hiwassee Dam, on the Hiwassee River

The dams recommended by the Authority for construction and for which Congress has appropriated funds for project investigations are:

Watts Bar Coulter Shoals, both on the main stream¹⁷

While the Fontana project on the Little Tennessee River was recommended in the report entitled The Unified Development of the Tennessee River System (comp. ex. 328 (original), r. 3068), submitted to Congress on March 31, 1936, pursuant to section 4 (j) of the Tennessee Valley Authority Act (app. II, 5), Congress has made no appropriation either for construction or investigation at that site, and neither construction nor preliminary investigation nor other work is in progress on it (fdg. 40, r. 603, 604, app. I, 23, 25). The Authority has no plans and has made no investigations of any substantial character for the construction of any other dams; no other projects have been recommended for construction by the Federal Government (fdg. 230, r. 650, app. I, 32).

The finding does not record Gilbertsville Dam under construction. Funds for beginning construction at Gilbertsville were appropriated subsequent to the trial (Independent Offices Appropriation Act, fiscal year 1939, Public, No. 534, 75th Cong., 3d sess. (see app. II, 92)).

Second Deficiency Appropriation Act, fiscal year 1937, 50 Stat. 213 (app. II, 83).

The sequence of construction has been determined according to the requirements of navigation and flood control, and not of power. The complainants' witness Crane so testified and the court so found (Crane, r. 1285; fdg. 75, r. 618, app. I, 46; Bowman, r. 2244-2247, 1758; Barker, r. 1950-1951). This record furnishes the complete answer to appellants' contention on this point (br. 29-31).

The location of the nine projects of the Authority, constructed, under construction, or recommended for construction, is shown on the map of the Tennessee River drainage basin appearing as defendants' exhibit 36 in the volume entitled Reproductions of Certain Original Exhibits Submitted by Appellees.

Each of the dams of the Authority, already constructed, under construction, or recommended for construction, is located on or near the site selected for the high dams by the Army Engineers in their report in House Document No. 328 (comp. ex. 105 (original) p. 4, r. 2615). This was conceded by complainants' witness Crane, and the court below so found (r. 1285; fdg. 41, r. 604, app. I, 25). The close correspondence between the dams of the Authority and those projected in House Document No. 328 for navigation and flood control appears from the testimony of the district engineer in charge of the survey embodied in that report (Watkins, r. 1548, 1579-1580; fdg. 41, r. 604, app. I, 25).

The design of the several projects, showing the locks, the slack-water navigation pool, the flood storage, and the facilities for the generation of power, appears

graphically in defendants' exhibits 38, 40, 44, 49, and 50 in Reproductions of Certain Original Exhibits Submitted by Appellees. A table containing data with respect to each dam, showing its location, drainage area, length of reservoir, elevation of gates, normal pool level, low pool level, and acre-feet of storage space, will be found in finding 43 (r. 605, 606, app. I, 27, 28).

As the court below found, each of the projects of the Authority has all the elements of design reasonably required for the combined purposes of navigation and flood control in accordance with accepted engineering standards (fdgs. 42, 68, r. 604, 615, app. I, 26, 42). Each has been designed to provide capacity for a slackwater pool behind the dam for navigation and a substantial additional storage capacity above the slackwater pool level for flood control. (See def. exs. 38, 40, 44, 49 in Reproductions of Certain Original Exhibits Submitted by Appellees.) Each of the main-stream projects is equipped with a lock designed by the Corps of Engineers, with space for an additional parallel lock when commerce warrants. The locks which are being installed are of sufficient size and capacity to accommodate adequately the traffic which may be expected in the reasonably near future (fdg. 42, r. 604, app. I, 26). Each of the projects is equipped with large spillway gates to provide effective means for flood control and stream-flow regulation (ibid.). In addition, the tributary projects are equipped with sluiceways of large capacity, through which may be discharged for navigation and flood-control purposes several times as much water as may be passed through the generator turbines (*ibid.*). Each of the projects can be operated to secure substantial benefits in the improvement of navigation, the control of destructive floods, and the production of electric energy (*ibid.*).

The testimony is uncontradicted that the projects of the Authority on the main stream and the tributaries of the Tennessee are the only projects which will provide flood control for the Tennessee and Mississippi Rivers in combination with a nine-foot navigation channel on the main stream of the Tennessee, and the trial court so found (Watkins, r. 1557; Clemens, r. 1651-1652, 1654-1655; Kimball, r. 1851-1852; Barker, r. 1977-1978; Bowman, r. 1759; fdgs. 60, 66, 68, r. 613, 614, 615, app. I, 38, 41, 42). The admissions of complainants' witnesses that the suggested alternative projects made no provision for Mississippi flood control leave no doubt on this point (Kurtz, r. 1229; Kelly, r. 1376-1377).

6. THE BENEFITS SECURED BY THE PROJECTS

It has been found unanimously, and it cannot be disputed, that the projects of the Authority when completed will provide a continuous nine-foot channel with appropriate overdepths over the entire distance from the mouth of the Tennessee River at Paducah, Kentucky, to Knoxville, Tennessee, approximately 650 miles, and will substantially alleviate the destructive floods in the Tennessee and Mississippi River basins (fdgs. 39, 52, 53, 65, 68, r. 603, 610, 614, 615, app. I, 23, 33, 34, 40, 42).

Navigation: The trial court found that each of the Authority's projects will result in substantial improvement to navigation (fdg. 53, r. 610, app. I, 34). The continuous nine-foot channel which will be created will make the Tennessee River an integral part of the great inland waterway system centering on the Mississippi (fdgs. 51, r. 610, app. I, 33). This channel will be physically integrated with that existing on the other sections of the interconnected Mississippi system. As the court found:

The boats and barges which are now in general use on the interconnected inland waterways of the Mississippi River system will be able to navigate the Tennessee River where improved by the projects of the Authority without change of design or extent of loading [fdg. 54, r. 610, 611, app. I, 34, 36].

The importance of this achievement, in view of the century-old effort to accomplish it, would be difficult to exaggerate, though appellants now characterize the waterway as an "incidental channel" (br. 109). The geographical setting of the waterway and its significance to national commerce has been discussed supra, pages 15-16. The trial court found that the improvement provided by the projects of the Authority will cause a substantial development of waterway traffic between the Tennessee Valley region and other regions of the United States connected by water, rail, and highway (fdg. 56, r. 611, app. I, 36). It should be observed that the value of the improvement to navigation will not be limited to the reduction in the cost of trans-

portation to shippers but will include substantial intangible values, such as the stimulation of growth of industry and business and the promotion of the general prosperity of the region under the influence of the improved waterway (fdg. 57, r. 612, app. I, 37; Putnam, r. 1182-1183).

Even prior to completion of all the recommended projects on the main stream, navigation will be materially improved through the combined operation of the existing main-stream projects and the tributary dams. The completed Norris Dam is being operated to provide a navigation channel of seven-foot minimum depth in the 207-mile stretch between Pickwick Landing and the mouth of the Tennessee River (fdg. 71, r. 616, app. I, 44). Upon completion of the Hiwassee Dam on the Hiwassee River the depth below Pickwick will be increased to seven and a half feet (ibid.). Together with Wheeler and Wilson Dams on the main stream, already constructed, and Pickwick Landing and Guntersville Dams, under construction, these projects will provide a commercially feasible navigation channel between Chattanooga and the inland waterway system, a distance of 464 miles (ibid.). As a result of the completion of the dams now under construction, for the larger part of each year there will be a through navigation channel of nine feet from Chattanooga to the mouth of the river (ibid.). court unanimously found that the tributary projects would substantially increase the navigation depths on the lower Mississippi River and on the shallow upper_ reaches of the navigation pools created by the mainstream dams, and that this result would be of material benefit to navigation on the Tennessee and Mississippi Rivers (fdg. 69, r. 616, app. I, 43; see also fdg. 52, r. 610, app. I, 33).

Flood control: The court unanimously found that each of the projects is of substantial value for the reduction of flood heights in the Tennessee and Mississippi River basins (fdg. 65, r. 614, app. I, 40). A total of 8,925,000 acre-feet of controlled flood storage will be made available by the projects of the Authority (fdg. 43, r. 605, 606, app. I, 27, 28). Of this amount, 6.543,000 acre-feet will be available at the main-stream dams and 2,382,000 acre-feet at the two tributary dams (ibid.). The distribution of the space among the various projects is shown in the table in finding 43 (ibid.). In the operation of the dams as discussed infra (pp. 48-51), a total of 4,034,000 acre-feet of the same reservoir space is used both for storage in the flood season and releases during the low-water season (ibid.). The contention of appellants that the Authority's projects have merely displaced so-called "valley" or "natural" storage is absurd. So-called valley storage is simply the changing space occupied by the flood itself as it moves down the valley and spreads its destructive force (fdg. 66, r. 614, app. I, 41).

If the projects of the Authority had been in operation during the past floods since 1897, they could have reduced the height of all major Mississippi floods since that date by two feet or more from Cairo, Illinois, at least to Helena, Arkansas; and it is reasonable to expect that these projects will make possible a reduction

similar in extent in all probable floods in the future on the lower Mississippi. This is the conclusion set forth in the testimony of several highly qualified witnesses and supported by thorough studies and investigations (Kimball, r. 1838-1839; Clemens, r. 1650-1651; Floyd, r. 1890, 1891; Okey, r. 1933-1934; Kelly, r. 1381). The importance of this contribution to the control of Mississippi floods is sufficiently evidenced by the fact that the existing levee system for the control of Mississippi floods is now recognized as inadequate, and by the further fact that as originally designed the levee provided only a one-foot freeboard (Kelly, r. 1378-1382; fdg. 62, r. 613, app. I, 39). The reduction provided by the Authority's projects will provide substantial additional flood protection for the lower Mississippi, a substantial safety factor for the levee system, and reduce the frequency of the use of floodways and the flooding of backwater areas (Clemens, r. 1645-1646, 1650-1651, 1672; Okey, r. 1914-1919, 1922; fdg. 65, r. 614, app. I, 40).

While, as pointed out below, any one of the dams cannot be viewed in isolation if its benefits are to be adequately understood, nevertheless, in view of the attack made on the tributary dams, it is noteworthy that the court found that Norris Dam, even before the completion of the system, has been successfully operated to improve substantially the navigation channel of the Tennessee between Wilson Dam and its mouth, to prevent a probable flood at Chattanooga in the year 1936, and to hold off through the peak of the Mississippi flood of 1937 approximately 28,000 cubic

feet per second (fdg. 73, r. 617, app. I, 45). For a period of six weeks during the Mississippi flood of 1937, Norris Dam stored the entire flow of the Clinch River (ibid.), which itself may have saved the city of Cairo (r. 4315; cf. Kelly, r. 1383; Clemens, r. 1645).

In addition to their effect on the reduction of flood peaks on the lower Mississippi, the projects of the Authority are likewise important to serve the purpose of flood control on the Tennessee. The court found that for effective flood control in the Tennessee basin it is desirable to provide high dams with controlled storage both on the main stream and on the tributaries, including the Clinch and Hiwassee Rivers (fdg. 60, r. 613, app. I, 38). It is true that the projects will not alone eliminate the flood hazard at Chattanooga, but no series of reservoirs ever proposed would of themselves accomplish that end without the construction of local protection works (Kurtz, r. 1204; comp. ex. 328 (original) p. 19, r. 3068). It is also true that the projects would have to be supplemented by a project on each of the major tributaries of the Tennessee above Chattanooga, including the Little Tennessee, the French Broad, and the Holston, in order to reduce the height of the greatest possible flood sufficiently to make feasible the construction of the necessary levee works by the city of Chattanooga (Kimball, r. 1836; comp. ex. 328 (original) p. 18, r. 3068). But it cannot be denied that if the Authority's projects had been in operation in the past, they would have eliminated substantially all flood damage at Chattanooga for which adequate records are available (Kimball, r. 1835-1836; def. ex.

82, r. 4097). And in any system established for effective control of Tennessee floods, the projects of the Authority on the main stream and on the tributaries should be included (Kimball, r. 1834-1835; Watkins, r. 1539-1540; fdg. 60, r. 613, app. I, 38).

Appellants, while conceding that the projects of the Authority could be operated to obtain these benefits. set up an alternative system which they insisted would secure at least the same benefits at lesser cost. system, projected for purposes of the case by appellants' witness Kurtz, consisted of a series of detention reservoirs on the Tennessee. That hypothetical system is discussed more fully infra, pages 86-87. It is enough here state that, as the court found and as the appellants acknowledge, the system would have no value for flood control on the Tennessee below Chattanooga and none whatever for Mississippi flood control (fdg. 66, r. 614, app. I, 41). This hypothetical plan would thus plainly fail to conform to the legitimate interests of Congress. In fact, as the witness Clemens testified, the system might be a positive menace in conditions of flood on the Mississippi (r. 1654-1655; fdg. 70, r. 616, app. J. 44). Furthermore, the system of detention reservoirs would involve the pre-emption of the limited number of sites available on the Tennessee for the construction of multiple-purpose projects; and since the detention reservoirs would have no value except for local flood protection above Chattanooga. they would forever preclude the utilization and development of the river by anyone for the combined purposes sought to be realized by Congress (fdgs. 66-70, r. 614-616, app. I, 41-44).

Improvement of national-defense projects: There is no dispute in the record on the following finding of the court:

The increase of the low-water flow by means of the storage of water during the high-water season at Norris Dam and the release of such water during the low-water period has increased and will substantially increase the continuous water power available at Wilson Dam and will increase the value of Wilson Dam for all purposes [fdg. 72, r. 617, app. I, 45].

7. THE OPERATION OF THE PROJECTS FOR NAVIGATION AND FLOOD CONTROL AND THE PRODUCTION OF POWER

Section 9a of the act (app. II, 13) makes explicit the requirement that the projects of the Authority be operated primarily in the interest of navigation and flood control. The detailed method of operation in conformity with this requirement must necessarily be determined on the basis of engineering experience and investigation. The engineers of the Authority in responsible charge have determined upon a method of operation for the projects, on the basis of a study of all available records, which in their judgment is the most effective method for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River basins (fdg. 44, r. 608, app. I, 30). The projects of the Authority which are com-

pleted and in operation have been and are operated primarily for navigation and flood control; the responsible officers of the Authority charged with the operation of the projects are required by instructions from the board of directors to operate them primarily for those purposes, and these instructions have been uniformly obeyed. This was the unanimous finding of the court (fdg. 76, r. 618, app. I, 47).

The method of operation determined upon and carried out by the engineers of the Authority may be described succinctly as follows. The reservoir levels of the main-stream dams below Chattanooga are head somewhat above low pool level during the flood season and drawn down to or below such level in advance of a flood; those above Chattanooga are to be held at about low pool level during flood season. As the flood season draws to a close, about the begining of April. reservoir levels on the main stream are allowed to rise. The reservoir levels of the tributary projects are maintained at about low pool level at the beginning of the flood season, and a substantial portion of the storage capacity below so-called normal pool level is gradually filled during and after the flood season. A sufficient capacity is held available at the close of the flood season to control the largest run-off that may be expected at that time. The water stored in the reservoirs on the tributaries and the main stream is released during. the low-water season to augment the low-water flow (fdg. 45, r. 608, app. I, 30).

As the trial court found, the general method of operation set forth in finding 45 (r. 608, app. I, 30) con-

forms to the method of operation for navigation and for flood control contemplated in House Document No. 328 and House Document No. 259 (both supra; comp. ex. 105 (original), r. 2615; def. ex. 32 (original), r. 4062) and is reasonably calculated to provide most effectively for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River valleys without reduction in the effectiveness of the Authority's projects for either flood control or navigation (fdg. 46, r. 608, app. I, 31).

When operated for the improvement of navigation and the control of destructive floods, the dams of the Authority will provide, in addition to the benefits to navigation and flood control, a large amount of continuous power (fdg. 94, r. 621, app. I, 51). The amount of continuous power is determined by the available head and the minimum flow in low-water season (ibid.). The construction and operation of the projects of the Authority for navigation and flood control will concentrate the fall of the river at certain points, thus necessarily creating a head of water power, and will substantially augment the minimum flow in low-water season (ibid.). The so-called "dead storage" behind the dams is itself the navigation channel and necessarily forms a power head.18 The floodwaters stored in the additional storage space during or after the flood

The complainants' contention that the slack-water pools behind the tributary dams are valuable only for power is refuted by the findings of the court and the testimony of the witnesses Watkins and Barker (fdg. 68, r. 615, app. I, 42; Watkins, r. 1542, 1543; Barker. r. 1955-1957). It should be noted that this so-called "dead storage" at the tributary projects is only a small fraction of the total storage at these projects and in the entire system.

season may be released in low-water season, increasing power and the navigable depths in the stream below (Watkins, r. 1543-1544, 1633-1634). In this manner the same space used for flood control also serves the other functions. The power is thus acquired in the operation of the projects for flood control and navigation, and the trial court unanimously so found (fdg. 94, r. 621, app. I, 51).

There is no basis for the contention that the projects have been enlarged beyond the needs of navigation and flood control. The amount of storage in the Authority's projects over and above that required for maintenance of the nine-foot channel is somewhat less than the ten million acre-feet on the Tennessee River system recommended by the Mississippi River Commission for Mississippi and local flood control (H.Doc. 259, supra, def. ex. 32 (original) pp. 40, 46; Kelly, r. 1385-1386) and set forth in The Unified Development of the Tennessee River System as a guide to the Authority's objectives for Mississippi flood control (comp. ex. 328 (original) p. 19, r. 3068). Likewise, the total storage capacity of all the dams above Chattanooga, over and above the amount required for maintenance of the nine-foot channel, is less than the total recommended by the complainants' witness Kurtz for Tennessee flood control (cf. comp. ex. 353, r. 3086, with fdg. 43, r. 605, 606, app. I, 27, 28). The benefits to navigation and flood control described above could not be obtained by any alternative structures. The trial court found on the basis of the uncontradicted evidence that the high-dam projects of the Authority, both on the main stream and the tributaries of the Tennessee River, are the only projects which will provide effective flood control for the Tennessee and Mississippi Rivers in combination with a nine-foot navigation channel on the Tennessee River (fdgs. 66, 68, r. 614, 615, app. I, 41, 42).

The appellants' sole claim is that the same flood storage cannot be operated both for flood control and power. It is sufficient answer that, as the trial court found, there is no such conflict in the operation of the projects of the Authority (fdg. 47, r. 609, app. I, 31). The Authority's method of operation is reasonably calculated to provide most effectively both for flood control and for navigation, and the trial court so found (fdg. 46, r. 608, app. I, 31). See argument, infra pages 90-94.

Appellants' statement that the tributary dams create five-sixths of the power has no basis in fact. As well might it be said that all the power is produced by the main-stream dams. The tributary dams produce no firm power whatever. For months their generators are nonproductive and no water is released (Woodward, r. 1786). These dams merely provide an increased water supply in the dry months, the main-stream dams producing practically all the power for the remainder of the year (def. ex. 139, r. 4186; Wessenauer, r. 2175-2180).

Appellants' basic error on this question and throughout their argument is their failure to recognize the necessary interrelationship of all of the projects of the Authority in the performance of the inseparable functions of navigation and flood control. Both of these related functions are served by each

project, and each is operated for both. But no dam is independent. Significantly, the river system itself is unitary, and a proper regard for its control in the interest of the combined functions of navigation and flood control requires that the operation of all the projects be coordinated. In general, storage and releases in the tributary reservoirs must be responsive to the needs of the main stream. The effective control of floods requires carefully coordinated operation of all the dams from day to day. Flood routing throughout the stream is a scientific problem. Each of the dams should be under effective control and operated with due regard for the status of the reservoirs at the other dams, and the operation of the system as a whole must meet the requirement of reducing the flood crest at the point of danger.

The Authority's projects must serve not merely Tennessee navigation and flood control but Mississippi flood control as well, a point virtually ignored in appellants' brief. There can be no doubt that for the most effective flood control a combination of both mainstream and tributary dams is necessary (fdgs. 60, 66, r. 613, 614, app. I, 38, 41). The function of the tributary dams is to reduce the volume of the floodwaters and enable the main-stream dams closest to the danger point to reduce the crest (Kimball, r. 1838, 1850; Clemens, r. 1651, 1652; Floyd, r. 1891-1894). Whether

The assertion that the main-stream dams above Chattanooga would be valueless in a great Tennessee flood because they would be drowned out simply ignores the fact that their effectiveness depends on a reduction in the volume of the flood by tributary projects, and that, this accomplished, the main-stream dams can operate most effectively to reduce the flood peaks at the exact place and time needed (Kimball, r. 1869).

the storage capacity at one of the dams is relatively small, as at Guntersville, or relatively large, as at Gilbertsville, is immaterial. It is the total capacity of the system that matters, provided only that there be a reasonable balance between main-stream and tributary storage (Clemens, r. 1657). The interrelationship and interdependence extends to navigation in combination with flood control. Thus, the navigation depths on the lower 200-mile (and controlling) stretch of the Tennessee River can be maintained by stream-flow regulation (fdg. 71, r. 616, app. I, 44), which permits substantial additional capacity to be made available at Gilbertsville (in close proximity to the Mississippi River) for the reduction of the flood crest without diminution of the necessary nine-foot navigable depth. The importance of this consideration is fully developed in the testimony of the witness Floyd (r. 1891-1894) and established by the findings (fdg. 69, r. 616, app. I, 43). The methods of coordinated operation are discussed more fully in the argument.

8. THE METHOD OF DISPOSAL OF THE POWER

With the complete generating units which have already been installed or are under contract for installation at Norris, Wheeler, Guntersville, Wilson, and Pickwick Landing Dams, the dams constructed or under construction by the Authority will have a firm-power capacity of 395,000 kw (fdg. 94, r. 621, app. I, 51). Together with the additional generating units at these dams and at Hiwassee and Chickamauga Dams

which have been authorized and for which appropriations have been made or requested, the dams of the Authority will have a firm-power capacity of 570,000 kw (ibid.). Of this amount, the Authority is already committed to supply 310,530 kw, as shown by the contracts in evidence (fdgs. 165-168, r. 637, app. I, 74-75). There is a steadily increasing demand for electric energy in this area, as well as unserved potential markets (fdgs. 233-235, r. 651, app. I, 94). As shown by the evidence and found by the court, it is to be anticipated that the utilities within ready transmission distance of the Authority's run-of-the-river plants will require 310,000 kw of additional capacity in 1939 and 787,500 kw by 1943 (fdg. 231, r. 650, app. I, 92). It appears without dispute that the amount of power which will be available at the projects of the Authority is less than the amounts necessary to meet the increases in demand in the area which were predicted by witnesses for both sides (fdg. 238, r. 652, app. I, 95).

Failure to generate and sell the power created by the operation of the Authority's dams for navigation and flood control (fdg. 94, r. 621, app. I, 51) would result in its complete waste (fdg. 172, r. 638, app. I, 76). Section 9a (app. I, 13), which requires that the dams be operated primarily for navigation and flood control, also authorizes the board, so far as may be consistent with these purposes, to provide for the generation and marketing of electric energy in order to avoid the waste of water power and, so far as may be practicable, to assist in liquidating the cost or aid in the maintenance of the projects. Provisions for the generation

of power at each of the projects and installation of generating facilities at some of them have been made pursuant to this section. Sections 10 and 11 (app. II, 13-15) provide for sales of power to States, public agencies, corporations, and rural areas, preference to be given, in accordance with familiar precedent, to public agencies and quasi-public membership corporations. Section 12 (app. II, 15) authorizes the board to construct or acquire transmission lines "In order to place the board upon a fair basis for making such contracts and for receiving bids for the sale of such power."

A full discussion of the method of disposal of the Authority's power, pursuant to these statutory provisions, is contained in the argument (infra p. 106 et seq.). The salient facts may, however, be summarized here.

The market for the power at the dam sites is dominated by three affiliated companies of the Commonwealth and Southern system (fdg. 177, r. 639, app. I, 78), and the market for at least 100 miles from any of the dams is likewise controlled by that system and, to a much smaller degree, by the Electric Bond & Share Company (ibid.). The Authority has in fact sold large amounts of power to the Commonwealth and Southern companies (fdgs. 196, 213, r. 643, 646, app. I, 82, 87). Pursuant to the provisions of the statute, the Authority has entered into contracts for the sale of power at wholesale to municipalities and to rural cooperative associations serving consumers theretofore without electric service and has contracted for the sale of firm and secondary power to large electrochemical

and electrometallurgical industries constituting new electric business in the area (fdgs. 203-207, r. 644-645. app. I, 84-86; fdg. 151, r. 633, app. I, 69). The Authority does not own or operate any local or urban retail distribution systems20 and does not attempt to control the operations of such systems (fdgs. 106, 140-147, 187, 193, r. 624, 631-632, 641, 642, app. I, 56, 66-68, 80. 82). The municipalities and cooperatives purchasing power from the Authority assume the responsibility at the point of delivery and sell and distribute the power over their own facilities with their own operating staffs and without assistance or direction from the Authority (fdg. 140, r. 631, app. I, 66). In order to serve its purchasers, the Authority has constructed or acquired about 1,100 miles of marketing transmission lines (fdgs. 183, 186, r. 640, 641, app. I, 79, 80), the largest of which is about 100 miles in length (def. ex. 136, r. 4175; def. ex. 136A in Reproductions of Certain Original Exhibits Submitted by Appellees).

The essential similarity of these facilities and classes of purchasers to those involved in the Ashwander case is evident. The similarity is analyzed in some detail in the argument *infra*, pages 114-116.

A word should be added regarding the size of the Authority's undertaking. The phase of the undertaking dealing with the disposal of power has been greatly magnified by appellants. Although, as has been pointed out, the firm-power capacity of all the seven dams of

The Authority owns a small number of rural lines in the vicinity of Norris and Wilson Dams, some of which were purchased from the Alabama Power Company and The Tennessee Electric Power Company (fdgs. 106, 187, r. 624, 641, app. I, 56, 80). No question is raised as to these.

the Authority now constructed or authorized for construction is 570,000 kw at 60% load factor, with all the generating units installed or authorized for installation (fdg. 94, r. 621, app. I, 51), appellants persistently use a figure of 1,100,000 kw of firm capacity at the same load factor (see, e.g., br. 67), an amount almost twice as great. As is explained *infra*, page 109, the latter figure is based on hypothetical calculations which assume unauthorized installations at unauthorized dams and unauthorized interconnections with privately owned plants. The same fallacy is responsible for the tenfold ballooning by appellants of the Authority's 1,100 miles of transmission lines (plus about 400 miles of plant tie lines) into 15,000 miles of lines (br. 69). See *infra*, pages 111-112.

In pointing to these exaggerations, we do not seek to minimize the scope of the Authority's undertaking insofar as it relates to power. That undertaking is an impressive one, though it is not nearly so large as the historic undertaking of the Government in developing and marketing its real property, the public domain, and it is quite comparable to the disposal of power at the Government's Boulder Canyon project (see infra pp. 141-145). But the phase of the Authority's undertaking which is concerned with power must be viewed in relation to the other aspects of the project. A system of structures which will create and maintain a nine-foot navigable waterway throughout a distance of 650 miles and which will provide almost 9,000,000 acre-feet for controlled flood storage can be expected to make available a proportionate amount of power. If the undertaking is large, it is large in all its aspects, all its functions, and all its benefits.

Since the legal issues concerning the validity of the dams and the property in the resulting power depend upon the application of settled principles to the engineering facts set out above, we have, for purposes of clarity, placed the argument on those issues immediathely following this statement of facts and in advance of the argument on the right of the complainants to maintain their suit. Considerations of convenience seemed to dictate such a course. It is our position, however, adhered to throughout the case, that the complainants are without sufficient legal interest to maintain this suit, and that the case may be disposed of upon that ground.

SUMMARY OF ARGUMENT

1

Under the decision of this Court in the Ashwander case, electric energy which "comes into being in the operation of works constructed in the exercise of some power delegated to the United States" is the lawful property of the United States. Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 340. The question for decision on this aspect of the case is whether the projects of the Authority were authorized for and substantially serve constitutional functions.

The Tennessee Valley Authority Act sets forth as its basic purposes the improvement of navigation, the control of destructive floods in the Tennessee and Mississippi River basins, and the promotion of national defense. The importance of these functions is attested by the fact that each was the subject of extensive investigation and endeavor by Congress, the Corps of Engineers of the Army, and other interested bodies prior to the consideration and enactment of the statute. The projects of the Authority are limited by the act to such as will serve these basic constitutional functions, and Congress has specifically authorized the several structures in that view. The whole record confirms the legislative judgment that the projects are appropriate means for the accomplishment of the functions prescribed in the statute.

1. Under any theory of constitutional authority, however narrow, the power generated at the projects

is lawfully acquired, since these are the only projects capable of providing flood control on the Tennessee and the Mississippi in conjunction with a nine-foot navigation channel on the Tennessee. That the projects will create and maintain a continuous nine-foot waterway throughout the 650-mile length of the Tennessee is undisputed. Not only the main-stream dams, but the two tributary dams as well, will provide substantial benefits to navigation both on the Tennessee and the Mississippi, by virtue of releases of stored water in low-water season. It is contended by appellants that a comparable navigation improvement could have been obtained by the construction of a less costly system of 32 low dams. While the relative advantages and disadvantages of the alternative systems are not legally material, the record demonstrates and the trial court found that the projects of the Authority will provide a navigation channel superior to that which could be provided by any alternative system.

The function of the projects in serving to control floods in the Tennessee and Mississippi River basins furnishes additional ground for their validity. Even if the power to construct flood-control works must be rested on the power to improve navigation, the test is met by these projects, since their operation for flood-control purposes results in substantial benefits to navigation. Jackson v. United States, 230 U.S. 1, 23; Cubbins v. Mississippi River Comm., 241 U.S. 351, 368-369. But Congress has power to promote and protect interstate commerce on land as well as on water, and accordingly to engage in flood-control measures where,

as on the Tennessee and the lower Mississippi, there is a serious flood menace to all forms of interstate commerce. Cf. Wilson v. New, 243 U.S. 332; National Labor Relations Board v. Jones & Laughlin Steel Corp., 301 U.S. 1. In addition, the power of Congress to cope with the recurring threat of floods can be rested on its power to make expenditures for the general welfare. Cf. Steward Mach. Co. v. Davis, 301 U.S. 548.

The interest of national defense is substantially served by the tributary dams which release water during the low-water season and so enhance the value and usefulness of the Government-owned properties at Muscle Shoals.

The construction and operation of the projects for the purposes of navigation and flood control will, as the court found, necessarily produce a large amount of continuous power. Pursuant to section 9a of the act, which directs that the Authority operate its projects primarily for the purposes of promoting navigation and controlling floods, the board of directors has instructed the responsible officers of the Authority to operate them primarily for those functions, and these instructions have been uniformly obeyed. In the operation of the projects there is no real conflict between the utilization of storage capacity for flood control and the production of power.

2. As has been stated, the Authority's projects are the only ones capable of providing flood control in the Tennessee and Mississippi River basins in conjunction with nine-foot navigation on the Tennessee,

and the operation of the projects for those purposes necessarily produces a large amount of continuous power. But even if the facts were otherwise, the property in the power would nonetheless be lawfully acquired by the United States. In providing works which appropriately serve as navigation and flood-control structures, Congress may determine the size of the projects and the mode and manner of their use, and the power which is thus acquired is the lawful property of the United States. Arizona v. California, 283 U.S. 423, 456; Green Bay & Miss. Canal Co. v. Patten Paper Co., 172 U.S. 58, rehearing denied, 173 U.S. 179; United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53.

The development of the Tennessee River for navigation alone or for flood control alone by systems of structures such as those suggested by appellants would require that the development of the river for other legitimate purposes be abandoned. The number of sites for such structures on the river is strictly limited, and if they were preëmpted for any single function, the development of the river for other related uses would be permanently foreclosed.

The means of disposition of power authorized by the statute are lawful. As this Court held in the Ashwander case, the water power created by these projects is the property of the United States, may be converted into electric energy, and, under the property clause of the Constitution, all of the electricity so acquired may be disposed of by transmission to the market and by sales to municipalities, rural cooperatives, and industrial customers. Ashwander v. Tennessee Valley Authority, supra.

1. In the Ashwander decision this Court upheld the validity of a contract providing for sale to the Authority of certain transmission lines of the Alabama Power Company serving a number of municipalities in northern Alabama, as well as auxiliary lines serving rural and industrial customers. There is no distinction between the means of disposition set forth in this record and those approved in that decision. The Authority is now selling power to the same classes of customers as those served by the lines purchased under the contract approved in the Ashwander case. And, as found by the trial court, all of the marketing facilities constructed and operated by the Authority, namely, transmission lines, substations, and rural lines, are similar in character and function to the facilities purchased under that contract.

In this case, as in the Ashwander case, the method of disposition is necessary to avoid a private monopoly of the Government's property, to prevent waste, and

to secure a widespread distribution of benefits pursuant to the statute.

2. As authorized by the act, the Authority's contracts with municipalities and cooperatives establish the resale rates to be charged by the distributors (sec. 10). Appellants have no standing to challenge these provisions in the contracts, since the provisions were voluntarily entered into by the municipalities and cooperatives, which are empowered to do so by valid Any advantage or disadvantage to appellants resulting from the rates adopted by the municipalities and cooperatives is merely the incidental result of the exercise of the rights vested in them by the laws of the States of their creation to set their own rates and to contract with respect to them. Edward Hines Trustees v. United States, 263 U.S. 143, 148; Sprunt & Son v. United States, 281 U.S. 249, 254 256; Wilbur v. Texas Co., 40 F. (2d) 787 (App.D.C., 1930), cert. denied, 282 U.S. 843; Georgia Power Co. v. Tennessee Valley Authority, 14 F.Supp. 673 (N.D. Ga., 1936).

In any event, these provisions of the contracts are valid. They were adopted, as the contracts recite, "In order to facilitate the disposition of surplus power generated by Authority and not needed by it in its operations, and in order to carry out the intention of Congress to encourage the more abundant use of electricity throughout the area in which municipality [cooperative] operates." In fact, these results have been secured (see, e.g., comp. ex. 118, r. 2771, 2802, 2804). The federal interests involved are apparent. The Gov-

comment is selling at wholesale. The demand for the Government property will be influenced by the rates charged to the ultimate consumer. The Congress, in the position of a trustee of Government property, may therefore authorize this means to assure a widespread diffusion of the benefits to the people. It has long been established that in disposing of its property the Federal Government may contract with the purchaser with respect to the use of the property and to the price at which it may be resold. Oregon & Calif.R.R. v. United States, 238 U.S. 393; United States v. Gratiot, 26 Fed. Cas. 12 (C.C.D.III., 1839), aff'd, 14 Pet. 526.

3. There is no invasion of the rights reserved to the States under the tenth amendment, even if it be assumed that the amendment constitutes an independent limitation on the exercise of granted powers. The denial of the power of the Congress to construct the necessary transmission facilities and to enter into the necessary contracts for the sale of the power would limit the Authority's market to sales at the dam sites where the Commonwealth and Southern companies, in all practical effect, are the only available purchasers.

The conclusive answer to the invocation of the tenth amendment is that the means of disposition do not impair the exercise of the States' police power. The emtrolling fact is that the Authority is dealing with municipalities and cooperatives who are subject at all times to the complete control of the States, and the State courts have determined that there is no abdica-

tion of State powers. Memphis Power & Light Co. v. Memphis, 172 Tenn. 346 (1937); Oppenheim v. Florence, 229 Ala. 50 (1934). An arrangement by which the State authorizes its agencies, at their election. to purchase property from the Government, still retaining in the State the right of regulation and control, can give rise to no questions under the tenth amendment. Cf. Steward Mach. Co. v. Davis, supra; United States v. Bekins, 304 U.S. 27. The States may authorize municipalities to construct and operate electric plants in competition with the appellant companies even though the result is harmful to the business of the companies. Alabama Power Co. v. Ickes, 302 U.S. 464. To the extent that this competition is related to the wholesale service of the Authority, the case is one of the federal exercise of the granted power to dispose of public property by sales to local public agencies who themselves engage in an enterprise authorized by the States. Such cooperation is permitted by the Constitution and not forbidden by the tenth amendment. Duke Power Co. v. Greenwood County, 91 F. (2d) 665, 673 (C.C.A. 4th, 1937); cf. Steward Mach. Co. v. Davis, supra; United States v. Bekins, supra.

Moreover, any effect of competition upon appellants' rates does not constitute regulation and is only the collateral effect of the exercise of a granted power. Duke Power Co. v. Greenwood County, supra; cf. Sonzinsky v. United States, 300 U.S. 506, 513-514; United States v. Carolene Products Co., 304 U.S. 144.

The federal power to dispose of Government property is not limited by the territorial scope of the project. The scope of the projects necessary for the disposition of public property is a question for Congress to determine (cf. Arizona v. California, supra; United States v. Hanson, 167 Fed. 881 (C.C.A. 9th, 1909)). In the Ashwander case, this Court rejected the contention that the amount of power which the Government may sell is limited by any consideration other than the amount lawfully available.

The resale-rate provisions of the contracts do not deprive the States of their power to regulate intrastate rates and are not in violation of the tenth amendment. The courts of the States in which these contracts are in force have held that there is no interference with State jurisdiction. Oppenheim v. Florence, supra; Memphis Power & Light Co. v. Memphis, supra. There cannot be said to be any impairment of State sovereignty where, as here, the States have authorized the contracts and have reserved a continuing power to revoke the authorization. Cf. Steward Mach. Co. v. Davis, supra; United States v. Bekins, supra.

4. The sale of power by the Authority and its wholesale customers does not constitute regulation, and the loss of appellants' business, if any, is not a "taking" of their property under the fifth amendment. Sonzinsky v. United States, supra; Standard Scale Co. v. Farrell, 249 U.S. 571; Pennsylvania R.R.Co. v. United States R.R. Labor Board, 261 U.S. 72; United States v. Los Angeles R.R., 273 U.S. 299. Cf. Walla Walla v.

Walla Walla Water Co., 172 U.S. 1; Joplin v. Southwest Mo. Light Co., 191 U.S. 150; Helena Water Works Co. v. Helena, 195 U.S. 383; Puget Sound Co. v. Seattle, 291 U.S. 619.

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1. Appellants have no standing to maintain this suit. Their municipal and county street franchises, licenses, or easements, at the most, confer only the right to enjoin the use of the streets and highways by one competing with appellants without a like franchise, license, or easement. No showing has been made that the Authority's facilities occupy the public streets and highways. Moreover, whatever the nature of the rights conferred by local street franchises, licenses, or easements, it is conceded that the Authority has been granted such rights by the local authorities in the areas in which it operates.

The only so-called "State franchises" which appellants, as a class, possess are corporate privileges derived under the general State laws governing incorporation and the qualification of foreign corporations. Such corporate "franchises" obviously confer no immunity from competition. Cf. Railroad Co. v. Ellerman, 105 U.S. 166. Appellants have not been required to obtain certificates of convenience and necessity to serve in the area in which the Authority is operating. Consequently, appellants are not within the protection of Frost v. Corporation Comm., 278 U.S. 515.

In any event, the State statutes in all the States in which the Authority is under contract to sell electricity within the claimed territory of appellants have exempted the Authority from the jurisdiction of the regulatory commissions and from the requirement of certificates of convenience and necessity. The validity of these exemptions is not challenged as unlawfully discriminatory. The decision of this Court in the Frost case merely holds that one who is required to obtain a certificate of convenience and necessity may enjoin competition by one who is subject to the same statutory provisions and has failed to comply with their terms. Carolina Power & Light Co. v. South Corolina Public Service Authority, 94 F. (2d) 520 (C. C.A. 4th, 1938), cert. denied, 58 Sup. Ct. 1048. It is insufficient answer that the powers of the Federal Government may not be enlarged by State enactments. The validity of these State statutory exemptions (which is not challenged by appellants) may be supported without regard to the constitutional validity of the Tennessee Valley Authority Act.

2. In addition to their lack of the necessary franchises, nine of the appellant companies are not shown to be threatened with damage by any concrete act of the appellees. In the claimed territory of these appellants the Authority neither owns electric facilities nor has it negotiated any contracts for the sale of power. As to these appellants, obviously no justiciable controversy is presented. Ashwander v. Tennessee Valley Authority, supra. Four other appellants, all members of the Commonwealth and Southern system, are es-

topped to deny that the power of the Authority is lawfully acquired and are likewise estopped from challenging the validity of the transmission and the marketing of the power. These companies have purchased a large proportion of the total amount of the power developed and generated at the projects of the Authority, both at the switchboard and, in the case of the Alabama Power Company, at the end of the Authority's transmission line; and all of them have received many other benefits under the provisions of the act now challenged. Acceptance of these benefits estops these appellants from questioning the validity of the provisions of the act under which the benefits were received. Great Falls Mfg. Co. v. Attorney General, 124 U.S. 581; Wall v. Parrot Silver & Copper Co., 244 U.S. 407; St. Louis Co. v. Prendergast Co., 260 U.S. 469. The decision in the Ashwander case held merely that the purchase of power at the dam site under the circumstances of that case did not preclude an attack on separable provisions of the statute authorizing the acquisition of transmission facilities and is clearly distinguishable from the case at bar.

3. Finally, the competition of which the appellants complain is the competition of the municipalities and cooperatives and not of the Authority, and under the decision in Alabama Power Co. v. Ickes, supra, the appellants cannot challenge the validity of the contracts between the Authority and these municipalities and cooperatives. Appellants' legal interest is the same whether the permanent electric supply of the

municipal and cooperative distribution systems is generated by facilities owned by the United States or by facilities owned by the distributor but constructed by means of federal loans and grants.

The potential damage alleged to result from the loss of the wholesale municipal and cooperative markets served by the Authority is wholly speculative and unreal. Neither the municipalities nor the cooperatives were potential customers of the appellants. The same is true of the large electrochemical and electrometallurgical industries under contract with the Authority which have located in the claimed territory of the Commonwealth and Southern companies.

On the whole record, appellants have failed to show a sufficient legal interest to maintain this suit, and the case presented does not admit of judicial determination.

IV

The trial was fair and exhaustive. On the whole record, it is clear that the rulings of the trial court on evidence and procedure were well within its discretion, and, in any event, appellants have failed to show any prejudicial error sufficient to justify or even to permit the remand of a case of this character.

ARGUMENT

I

THE POWER GENERATED BY THE AUTHORITY IS ACQUIRED IN THE OPERATION OF PROJECTS CONSTRUCTED PURSUANT TO THE CONSTITUTIONAL POWERS OF CONGRESS AND IS THE LAWFUL PROPERTY OF THE UNITED STATES.

As this Court held in the Ashwander case, the electric energy which "comes into being in the operation of works constructed in the exercise of some power delegated to the United States" is the property of the Government (Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 340). It is clear, we submit, from the act, the evidence, and the findings that the power generated at the projects of the Authority is acquired in the operation of works lawfully constructed for the improvement of navigation and the control of destructive floods.

The Tennessee Valley Authority Act sets forth these basic purposes (see pp. 31-33, supra). There are important federal interests of navigation and flood control of accepted national significance which depend upon the improvement and control of the Tennessee River system. The act requires in section 4 (j) that the dams constructed by the Authority must be such as will best promote navigation and control destructive floodwaters in the Tennessee and Mississippi River basins; and section 9a prescribes that in the operation of the dams the stream flow must be regu-

lated primarily in the interests of navigation and flood control. The act is, therefore, plainly valid on its face. Moreover, the specific projects of the Authority have been authorized not only by the provisions of the basic statute but by particular appropriation acts pursuant thereto (see pp. 3-4, supra).

In the judgment of Congress, therefore, the projects serve the basic constitutional purposes which Congress has sought to promote. The burden is on appellants to show that on the whole record the legislative judgment is necessarily precluded. Cf. South Carolina State Highway Dept. v. Barnwell Bros., 303 U.S. 177, 191-192. That this burden has not been discharged must be evident from the statement of facts already set forth. The evidence and the findings, so far from detracting from the force of the legislative judgment, furnish independent and overwhelming confirmation of the appropriateness of the projects for the basic constitutional functions. It follows that power created in the operation of the projects is the lawful property of the United States. Ashwander v. Tennessee Valley Authority, supra.

Appellants contend that the power must be unavoidably produced in the sense that no system of projects incapable of producing power could have been devised to accomplish the federal functions. Upon this theory, appellants seem to argue that since Congress could have obtained a certain degree of navigation improvement by the construction of low dams not capable of producing power (or of controlling floods) and could have obtained limited flood protection above Chattanooga (for

the Tennessee River alone) by the construction of detention basins deliberately designed to avoid the production of power, the legislative choice is limited to those alternatives. The Constitution, it is submitted, imposes no such limitations on the congressional choice of means. But even on appellants' view, the power generated by the projects of the Authority is the lawful property of the United States, since the projects of the Authority are the only ones which can provide flood control on the Tennessee and on the Mississippi in conjunction with a nine-foot navigation channel throughout the Tennessee.

Appellants suggest the further question whether the power is produced as a result of an increase in the size of the projects beyond that needed for navigation and flood control alone. As is fully explained elsewhere (see infra pp. 88-94), the facts refute appellants' contention, and the trial court so found (fdgs. 46, 47, 52, 60, 66, 68, r. 608-609, 610, 613, 614, 615, app. I, 31, 33, 38, 41, 42). It is our position, however, that even though the facts were as appellants maintain, the conclusion would nonetheless follow that the power is lawfully acquired. It has been uniformly held that where a project constructed by the United States substantially serves a lawful purpose, the size of the project is for Congress to determine. This Court has held that it will not determine whether the particular structures are "reasonably necessary." Arizona v. California, 283 U.S. 423, 456; Green Bay & Miss. Canal Co. v. Patten Paper Co., 172 U.S. 58, rehearing denied, 173 U.S. 179; United States v. Chandler-Dunbar Water

Power Co., 229 U.S. 53. See also Buchanan v. United States, 78 Ct. Cl. 791 (1934), cert. denied, 294 U.S. 723.

The following discussion will be devoted first to showing that the power is necessarily acquired by the Authority in the operation of projects constructed for recognized constitutional functions (infra pp. 75-95). This is sufficient, on any view of constitutional authority, to establish the lawful ownership of the power of the Authority. We shall then show, in the alternative, that this is an unduly narrow view of the constitutional powers of the Federal Government; that it is for the Congress to determine the size and scope of the projects and the mode and manner of their use; and that the power so acquired is the lawful property of the United States (infra pp. 95-106).

1. THE PROJECTS OF THE AUTHORITY ARE SUBSTANTIALLY RELATED TO THE IMPROVEMENT OF NAVIGATION.

The substantial and indeed outstanding character of the navigation improvement which will be brought about by the Authority's projects is not open to dispute. In this regard the evidence and the findings in the present case go much beyond the facts in previously decided cases sustaining the power of Congress. Cf. Arizona v. California, supra.

While conceding that the main-stream dams will result in a substantial improvement of navigation, appellants contend that they are unconstitutional because a comparable improvement could have been obtained by the construction of a less expensive system of dams. The argument is that since Congress

could have obtained navigation improvements for less money, the fact that it elected to construct the more expensive projects, which are capable of producing power, establishes that the dams are power projects. Upon this theory appellants proceed with a consideration of the relative advantages and disadvantages of the alternative systems and reach the conclusion that the 32-low-dam system would produce a substantially similar channel. Then, ignoring the other major functions of the high dams, they conclude that the only purpose of expending the additional funds for the high-dam system was the production of power. The question of the relative advantages and disadvantages of the two systems is, of course, immaterial under any theory. It should be observed, however, as the trial court found, that the projects of the Authority will provide a navigation channel superior to that which could be provided by an alternative system (fdgs. 52, 54, r. 610, app. I, 33, 34).

The superiorities of the high-dam system are manifold and were recognized by the Board of Engineers for Rivers and Harbors in House Document No. 328, 71st Congress, 2d session (comp. ex. 105 (original) pp. 12-13, r. 4272). Among the substantial advantages inherent in the high-dam system are the superior channel depths, the fewer lockages, the smaller current velocities, the lesser pool fluctuations, and the elimination of interruptions from floods. The practical benefits accruing from these advantages, and particularly the substantial increase in economy and dependability of service upon which the success of any navigation de-

velopment depends, were fully canvassed in the testimony and are outlined in finding 54 (r. 610-611). This finding is supported by the testimony of several eminently qualified witnesses, including Watkins, Brodie, and Barker (see app. I, 34). It is of interest to note that the Corps of Engineers is now replacing movable-wicket dams of the type considered in House Document No. 328 with fixed dams of various heights and is generally avoiding the use of the movablewicket structures (Barker, r. 1974; Putnam, r. 1174-1175; fdg. 55, r. 611, app. I, 36). Of particular significance is the fact that at the time of the passage of the Tennessee Valley Authority Act the Corps of Engineers was engaged in the construction of a lock at the site of the Wheeler Dam which was designed for a high navigation and power dam with fixed crest substantially similar in design to the present Wheeler Dam (Bowman, r. 1762, 1763, 1765-1766; fdg. 55, r. 611, app. I, 36; Putnam, r. 1172).

Appellants appear to suggest that these advantages are offset by an alleged lesser carrying capacity and lack of integration with the Mississippi River system, resulting, as they claim, from two factors: (1) the winds and waves which they claim will be created on the wide pools of the high-dam system, and (2) the size of the locks now being provided above Wilson Dam. The facts are contrary to these contentions, and the trial court so found (fdgs. 42, 54, r. 604, 610, app. I, 26, 84). As to the alleged danger of wind and waves, it is sufficient to say that the witness James S. Brodie, the superintendent of mainte-

nance of the Federal Barge Lines and the only witness in this case with practical experience in large-scale commercial navigation, preferred the high dams with the long, wide pools (r. 2027). He added that the wind-and-wave action would have no adverse effect on any of the equipment now in general use on the inland waterway system (r. 2023-2024).

There is no basis for criticism of the size of the Authority's locks. The locks being constructed in the dams located above the existing Wilson Dam are of the same size and capacity as the locks installed by the Army Engineers at Wilson and Wheeler, and are larger than the lock in the existing Hales Bar Dam (Barker, r. 1951-1952; Putnam, r. 1172-1173). Since these three locks must be used by any equipment engaged in through navigation, it was decided after due consideration and consultation between the engineers of the Authority and representatives of the Corps of Engineers that for the present at least it would be uneconomical to construct the larger size locks in the upper portion of the river (def. ex. 112, r. 4111; Barker, r. 1951-1952, 1968). Below Wilson Dam larger locks are being installed. The locks as being constructed above Wilson are sufficient to accommodate the traffic to be anticipated there in the immediate future. Moreover, space has been provided at all of the dams for the construction of additional locks if and when the movement of traffic justifies them (fdg. 42, r. 604, app. I, 26; def. ex. 112, r. 4111).

Perhaps some mention should be made of appellants' present contention that the 32-low-dam system

as outlined in House Document No. 328 would have provided a minimum channel of nine feet with overdepths of three feet, whereas the channel being created by the Authority provides for overdepths of only two feet at the controlling points. The adequacy of the overdepths provided by the Authority's projects is fully established by the findings of the trial court, based upon direct evidence (fdgs. 54, 68, r. 610, 615, app. I, 34, 42). The assertion that the low-dam plan would have provided adequate overdepths is inferred solely from testimony that such was the practice of the Corps of Engineers, but the witness Barker, who had made a specific study of the engineering data upon which the low-dam plan was based, expressly testified that no provision was made for overdepths in the lowdam plan outlined in House Document No. 328 (r. 1973-The failure to provide adequate overdepths in the plan as outlined in House Document No. 328, contrary to the usual practice of the Corps of Engineers, is, of course, explained by the wholly hypothetical character of the low-dam plan. The provision for overdepths would require a change in the low-dam project, and, of course, increased cost.

While appellants disregard the explicit findings of the trial court on the comparative benefits for navigation and ignore the supporting evidence, they emphasize a statement of General Pillsbury, excluded by the trial court (r. 1617-1618, 2252), to the effect that the additional cost of the high dams is justified only for power (br. 35-36). This statement is quoted from Hearings before the House Committee on Military

Affairs, 74th Congress, 1st session (comp. ex. 365 (original), r. 3121). The complete document (as well as others of a similar character) was admitted in evidence because it contained statements of the Authority's directors constituting a quasi-official report to the Congress (r. 894), and the excerpts introduced into the record as excerpts were all limited to statements of the directors only (r. 1239-1240, 4345-4348). When complainants sought to use this statement of General Pillsbury for cross-examination, the court properly sustained the Government's objection (r. 1617-1618, 2252). If it were permissible to introduce such statements without opportunity for cross-examination, it would even more clearly be proper for the Government to introduce General Pillsbury's contemporaneous testimony in the Ashwander case that "There is no question as to the superiority of high dams over low dams for navigation" (record, Ashwander case, 754), and perhaps even the resulting finding of the district court in that case that "The high dam type of development will furnish navigation facilities superior to those that would be provided by the alternative low dams or by a combination of the two" (id., 1083).

It is unnecessary to burden this brief with further discussion of the comparative merits of the highdam and low-dam plans for navigation since it is conceded that the low-dam projects have no value for flood control (fdgs. 66, 70, r. 614, 616, app. I, 41, 44).

Appellants contend (br. 111-114) that in any event the tributary projects of the Authority have no substantial relation to navigation. The validity of these projects is sufficiently rested on their benefits to Tennessee and Mississippi flood control, a question more fully discussed below. It should be observed here, however, that the storage of water in these projects during flood season for flood-control purposes (Watkins, r. 1543-1544, 1633-1634) and release in the lowwater period will result in substantial benefits to Mississippi navigation (fdgs. 52, 69, r. 610, 616, app. I, 33, 43), and the benefits to Mississippi navigation from these flood-control structures amply sustain their validity. Cubbins v. Mississippi River Comm., 241 U.S. 351, 368-369; Jackson v. United States, 230 U.S. 1, 23.

The benefits of the tributary projects to Tennessee navigation are likewise substantial (fdgs. 69, 71, 52, 53, r. 616, 610, app. I, 43, 44, 33, 34). While, as we have shown above (see supra pp. 51-53), it is impossible to consider these benefits apart from the coordinated operation of these projects with the main-stream dams for the combined purposes of navigation and flood control, a few facts may be stated here which sufficiently demonstrate the error of appellants' position. It is not true, as appellants contend, that the only substantial value of the tributary projects for Tennessee navigation is a temporary one which will cease on the completion of the main-stream dams, although this benefit alone would be sufficient to support their constitutionality. Arizona v. California, supra at 457. The fact is that the benefits of the tributary projects for Tennessee navigation are permanent and substantial. It is surprising to find appellants taking a different position, in view of the fact that through the testimony of their own witness Putnam they sought to establish that the nine-foot channel in the 200 miles below the Pickwick Dam could be maintained by means of stream-flow water releases, particularly from the tributary dams, together with a moderate amount of dredging, and that the Gilbertsville project (the most important project of the Authority for flood control) was therefore without substantial value to navigation (fdg. 71, r. 616, app. I, 44; Putnam, r. 2312-2313). The benefits are no less after the construction of Gilbertsville. The availability of water stored in the tributaries, as explained above, makes a large amount of flood storage available at Gilbertsville (where it is most needed and effective), which would otherwise have to be filled to maintain the navigation channel (Floyd, r. 1891-1894; Barker, r. 1958).

What has been said sufficiently indicates that the projects must be viewed not merely in relation to navigation but also in relation to flood control in the Tennessee and Mississippi River basins.

2. THE PROJECTS OF THE AUTHORITY ARE SUBSTANTIALLY RE-LATED TO THE FEDERAL FUNCTION OF THE CONTROL OF DE-STRUCTIVE FLOODS IN THE TENNESSEE AND MISSISSIPPI RIVER VALLEYS AND ARE THE ONLY PROJECTS WHICH WILL PROVIDE SUCH FLOOD CONTROL IN COMBINATION WITH A NINE-FOOT NAVIGATION CHANNEL ON THE TENNESSEE RIVEB.

Appellants state that "the power of the Federal Government over flood control does not extend beyond the power to protect or improve navigable channels of interstate navigable streams" (br. 128). Even on this narrow theory the projects of the Authority are valid. As stated above, the tributary projects will substantially increase the low-water flow on the Mississippi River, which will be of substantial benefit to navigation on the Mississippi. The trial court so found, and its finding is amply supported in the testimony of the witnesses Watkins, Brodie, and Barker (see fdgs. 52, 69, r. 610, 616, app. I, 33, 43). Appellants contend that Congress has no power to control destructive floods unless such control results in a substantial benefit to navigation. Yet they attack the validity of the tributary projects as flood-control structures solely upon the ground that they are operated partially to increase depths in low-water periods in the interest of navigation.

Since the control of destructive floods on the Tennessee and Mississippi Rivers is in itself a substantial contribution to the improvement of navigation, the function of flood control may be regarded as an additional aspect of that power. Thus the validity of the construction by the United States of the levees on the Mississippi River as a legitimate aid to navigation was sustained by this Court with the observation that "the absence of merit in all the claims [to the contrary] is too clear to require anything but statement" (Jackson v. United States, supra at 23). In addition to increasing navigable depths in low-water periods, these dams protect navigation on both the Tennessee and Mississippi from interruption by floods (fdgs. 52, 59, 65, 69, r. 610, 612, 614, 616, app. I, 33, 38, 40, 43).

The validity of the projects as aids to flood control need not be rested, however, solely upon the effect of such aid in improving navigation. Congress has ample power to protect and promote the movement of interstate commerce on land as well as on the rivers. The menace of floodwaters on the Tennessee and lower Mississippi to the movement of interstate commerce by railway and highway is familiar (def. exs. 91, 66 in Reproductions of Certain Original Exhibits Submitted by Appellees). The great floods of the past on these rivers have caused complete interruption of commerce on the rivers and on the railroads and highways, as well as substantial damage to the facilities employed for these purposes (fdgs. 58, 59, r. 612, app. I, 37, 38). The obstructions to interstate commerce thus caused and threatened by floods bear even more direct and palpable relation to interstate commerce than the interferences held to be within the power of Congress in such cases as Wilson v. New, 243 U.S. 332, and National Labor Relations Board v. Jones & Laughlin Steel Corp., 301 U.S. 1.

Finally, if additional support were needed for the power of Congress to take effective measures to cope with the recurring threat of floods, it could be found in the power to make expenditures to provide for the general welfare. Surely it is no less within the power of Congress to spend funds for the prevention of these national disasters than for the relief of the victims. Cf. Steward Mach. Co. v. Davis, 301 U.S. 548.

The substantial benefits of the Authority's projects for Tennessee and Mississippi flood control have been sufficiently set forth in the statement (see supra pp. 43-47). Appellants ignore all the findings of the trial court on this subject and all of the supporting evidence. They dismiss without argument, for example, the unanimous finding that each of the projects of the Authority will be of substantial value in the reduction of flood heights on the Mississippi River (fdg. 65, r. 614, app. I, 40), and ignore the supporting testimony of Clemens, Kimball, Floyd, and Okey that the projects of the Authority alone could reduce the heights of all great Mississippi floods two feet or more from Cairo, Illinois, to Helena, Arkansas (Clemens, r. 1650-1651, 1637-1638); Kimball, r. 1838-1839; Floyd, r. 1890-1891; Okey, r. 1933-1934; cf. Kelly, r. 1381).

They rely, however, on a statement of General Pillsbury to the effect that the reduction of Mississippi flood heights by the projects of the Authority could be measured in inches (br. 60). This statement, like the one discussed above, was made in 1935 before the House Committee on Military Affairs, 74th Congress, 1st session (see comp. ex. 365 (original), r. 3121), at a time when none of the projects of the Authority had been completed and only a few authorized. The statement was not even called to the court's attention. Appellants ignore the fact that the Army Board of Engineers for Rivers and Harbors, when General Pillsbury was chairman, generally concurred in a contemporaneous report of the Mississippi River Commission finding that Mississippi flood heights could be reduced seven feet, sufficient to eliminate the use of the floodways, by a system of tributary reservoirs includ-

ing substantial storage on the Tennessee River system. and recommending that the Federal Government adopt a policy of encouraging the construction of such reservoirs (H.Doc. 259, 74th Cong., 1st sess., def. ex. 32 (original) pp. 11, 12, 33, 40, r. 4062). Appellants ignore the trial court's finding (fdg. 62/r. 613, app. I, 39) and the recent report of the Chief of Army Engineers (Com. Doc. 1, H.R.Com. on Flood Control, 75th Cong., 1st sess.; r. 1379-1380) that the existing flood-protection system is inadequate to protect the lower Mississippi Valley; that the Mississippi levees, designed with only one-foot freeboard (r. 1379-1914), have reached the limits of practicable height; and that tributary reservoirs are necessary for adequate protection; and complainants' witness, Colonel Kelly, agreed with each of these conclusions (r. 1379-1380). Appellants likewise ignore the trial court's finding (fdg. 63, r. 613, app. I, 40) and the recommendations of the Army Engineers in House Document No. 306, 74th Congress, 1st session (r. 1382), that the best available sites for Mississippi flood-control reservoirs are on the tributaries of the lower Ohio, including the Tennessee, a conclusion expressly concurred in by Colonel Kelly (r. 1382).

As an alternative to provide flood control complainants presented through their witness Kurtz a suggested system of nineteen automatically controlled detention basins (r. 1201-1209). Like the system of low dams proposed for navigation improvement, these basins would be incapable of producing power. They would, concededly, have no value for the alleviation of floods on the Mississippi, and hence their construction

would ignore one of the purposes expressly set forth in the Tennessee Valley Authority Act (Kurtz, r. 1222-1223). Indeed, as stated by the witness Clemens, they would constitute a positive menace to the Mississippi flood problem (r. 1654-1655). The court found as a fact that the complainants' hypothetical system of detention basins would be of no value for the control of floods on the lower Mississippi and might aggravate flood conditions there (fdgs. 66, 70, r. 614, 616, app. I, 41,44). It was also conceded that these projects would be of no value for navigation (Kurtz, r. 1219). Finally, as already noted, the system of detention basins would preëmpt for the single purpose of local flood protection the limited number of available sites and thus foreclose the development of the river for any other uses (fdg. 93, r. 621, app. I. 51). The construction of a system of such detention basins was never recommended by any public authority or professional group, nor, indeed, does it appear ever to have been proposed for the Tennessee by anyone outside the present trial.21

Even for its limited purpose of local flood protection on the Tennessee, the system appeared upon examination to be seriously deficient. The Authority's flood-control expert Kimball was convinced by his study of the proposal that the automatic control, considered essential by the sponsor of the plan, would render the project ineffective to control successive floods (r. 1843-1850). He was further of opinion that the failure to provide dams on the main stream, leaving without a reservoir the long stretch between Chattanooga and the nearest proposed tributary project, reduced the effectiveness of the projects as the distance increased (r. 1850). The trial court found that the detention basins would be of uncertain value even for Tennessee flood control (fdg. 66, r. 614, app. I, 41). At the trial complainants suggested as one of the benefits of the Kurtz system the protection afforded on the Emory River. The failure of the Authority's projects to provide such protection was suggested as a striking deficiency. Both of these contentions are renewed in appellants' brief (p. 124). As explained in the testimony of the witness Kimball, the damage on the Emory River was due to a single localized disturbance of the cloudburst variety. His testimony fully explains the impracticability of providing a sufficient number of reservoirs to protect against all of such local disturbances (r. 1827-1828, 1834). The figure of past damage on the Emory River, emphasized in appellants' brief, is without significance, since that damage resulted from one such local storm (r. 1827-1828, 1834).

The sufficient answer to all of appellants' contentions is that the projects of the Authority are the only projects which will provide flood control for the Tennessee and Mississippi Rivers in combination with nine-foot navigation on the Tennessee River (fdg. 68, r. 615, app. I, 42).

3. THE POWER PRODUCED AT THE PROJECTS OF THE AUTHORITY IS NECESSABILY ACQUIRED IN THE CONSTRUCTION AND OPERATION OF WORKS LAWFULLY CONSTRUCTED FOR THE IMPROVEMENT OF NAVIGATION AND THE CONTROL OF DESTRUCTIVE FLOODS.

Section 9a of the act directs the Authority in the operation of its projects "to regulate the stream flow primarily for the purposes of promoting nazigation and controlling floods." Pursuant to the mandate of the act, the Board of Directors of the Authority has instructed the responsible officers charged with the operation of the projects to operate them primarily for these functions. The trial court unanimously found that these instructions have been uniformly obeyed (fdg. 76, r. 618, app. I, 47).

The head for power, produced at the Authority's projects is necessarily created by the maintenance of the slack-water pools behind the dams for navigation. So much even appellants concede.²² Their contention

The appellants' contention that the slack-water pools behind the tributary dams are valuable only for power is unfounded. The court unanimously found that the provision of a slack-water pool behind Norris Dam was necessary to preserve existing navigation on the Clinch River, a navigable tributary of the Tennessee, and to prevent foreclosure of the river's future improvement for navigation (fdg. 68, r. 615, app. I, 42), a finding fully supported by the testimony of the witnesses Watkins and Barker (r. 1542, 1956-1957). The court below also found that the maintenance of the slack-water pool at the Hiwassee project would be of value for the preservation of its level by affording a capacity for the deposit of

that the projects are larger than required for navigation and flood control, as we have shown above (see supra pp. 50-51), rests solely upon the alleged principle, unfounded in fact as the trial court found (fdgs. 46, 47, 64, 69, 94, r. 608-609, 614, 616, 621, app. I, 31, 40, 43, 51), that the same storage capacity cannot be operated for both flood control and power, and that to whatever extent the storage is used for flood control it can produce no power. The trial court unanimously found that the power produced at the projects of the Authority is created by the construction and operation of the projects for navigation and flood control (fdg. 94, r. 621, app. I, 51).

The decisions of this Court, we submit, do not permit appellants to challenge the method of operation which in the considered opinion of the engineers in responsible charge will most effectively serve the interests of flood control and navigation (fdg. 44, r. 608, app. I, 30). This Court will not assume that the provisions of section 9a requiring the Authority to operate its projects "primarily for the purposes of promoting mavigation and controlling floods" are a sham and a pretense or that the mandate of the act will be disregarded. Arizona v. California, supra at 456-457. In that case it was contended that the purpose of navigation expressed in the act was a sham and a pretense upon the ground that the operation of the project for

silt (fdg. 68, r. 615, app. I, 42), a finding amply supported by the testimony of Watkins and Barker (r. 1543, 1955). The slack-water pool at the Hiwassee project, consisting of only 73,000 acre-feet (Bowman, r. 1724; see def. ex. 50 in Reproductions of Certain Original Exhibits Submitted by Appellees; Kimball, r. 1851)—out of a total of 12,959,000 acrefeet of all of the Authority's projects (fdg. 43, r. 605, app. I, 27)—is lardly an important issue in this case.

conflict with its operation for navigation. That contention was dismissed by this Court. This Court has held that it is for the Government to determine by what engineering methods the mandate of Congress may best be carried out. At what time and in what amount water should be stored and released for flood control and navigation can only be determined by the agency charged with operating the facilities for flood control and navigation improvement. "In such matters there can be no divided empire." The "mode and extent of the use and enjoyment" of federal projects "fall within the sole control of the United States." Green Bay & Miss. Canal Co. v. Patten Paper Co., supra at 80.

Since, here ever, the evidence and findings deal fully with complainants' criticism of the Authority's method of operation, it should be pointed out that the criticism is without merit in fact. The trial court found that this general method of operation conforms to the method contemplated for navigation and for flood control in House Document No. 328 and House Document No. 259 and is reasonably calculated to provide most effectively for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River valleys (fdg. 46, r. 608, app. I, 31).

There can be no serious question that the storage capacity above the navigation level on the main-stream dams can be operated with complete effectiveness for both flood control and power (Woodward, r. 1783-1784; Kimball, r. 1850-1851; Floyd, r. 1891; Kelly, r. 1387). The water stored during flood season in the flood

storage of the main-stream dams below Chattanooga can be drawn down in advance of floods, as Kelly and other witnesses stated (Kelly, r. 1387; Woodward, r. 1782-1783; Kimball, r. 1850-1851; Floyd, r. 1891). The flood season on the Tennessee River definitely ends about April 1-15, and that on the Mississippi a month later (fdg. 64, r. 614, app. I, 40; Woodward, r. 1788; Kimball, r. 1828; Kurtz, r. 1235; Kelly, r. 1386-1387; Clemens, r. 1665), and as the flood season draws to a close some of the flood storage at all of the main-stream projects may be gradually allowed to fill (Woodward, r. 1784; Kimball, r. 1851).

The principal issue is with respect to the gradual filling of Norris Dam during flood season and the release of stored water during low-flow season. It is conceded that no other possible method of operation would serve the interests of navigation. The substantial benefit to navigation, both on the Mississippi and Tennessee Rivers, is sufficient justification, as we have shown above (supra pp. 80-83).

The case is no better for complainants if the interests of navigation are disregarded. Like all sweeping generalizations, the alleged conflict between storage for flood control and storage for low-water regulation is not absolute; its existence or extent depends on the facts of the particular project. It has a limited application to reservoirs designed for local protection only (Watkins, r. 1543-1544; Bowman, r. 1738-1739).

The alleged conflict has no application to the projects of the Authority, which must be operated for the protection of distant points on the lower Tennessee,

Ohio, and Mississippi Rivers, as well as for navigation and local flood protection, and the court so found (fdg. 47, r. 609, app. I, 31). Norris Dam must be operated for both Tennessee and Mississippi flood control (Woodward, r. 1786-1789; Watkins, r. 1543-1544) and is beyond prediction distance of the principal points of danger in Mississippi floods-that is, the time of water travel from the dam to Cairo, Illinois, is greater than the time of notice of flood stage (Woodward, r. 1783). The importance of this factor was brought out by the complainants' witness Kelly, who adhered to the view expressed by the Reservoir Board for Mississippi Flood Control of 1927, of which he was chairman, that the tributary reservoirs beyond prediction distance should be operated to store the water every year throughout the season of probable Mississippi floods,23 while, on the other hand, the flood storageof dams within prediction distance should be brought into operation at the flood crest (r. 1386-1387). This conforms to the view expressed in the Authority's report to Congress entitled The Unified Development of the Tennessee River System (comp. ex. 328 (original) pp. 18-19, r. 3068). A similar view was expressed by Colonel Watkins both in this case (r. 1543-1544) and in House Document No. 328 (comp. ex. 105 (original) p. 78 (par. 52), r. 2615). That the distant tributary reservoirs like Norris should provide "seasonal" storage was contemplated in the Comprehensive Report on Reservoirs in Mississippi River Basin, House Docu-

While the Reservoir Board fixed this period as being from February 15 to May 15, Kelly testified that the season of Mississippi floods begins on the first of January (r. 1367). (See also Watkins, r. 1544.)

ment No. 259, 74th Congress, 1st session (def. ex. 32 (original), r. 4062), prepared under Clemens's direction (r. 1651, 1658, 1659). Clemens assumed that the Authority's flood-control storage would be available at the "beginning of the flood season" in his testimony as to the value of the Authority's projects for Mississippi flood control (r. 1659-1660), but that this storage would and could also be used for low-water regulation (r. 1665-1666). Specifically he testified that the flood storage at Norris Dam could be operated for flood control and at the same time to obtain large benefits for low-water regulation from the same storage capacity (r. 1654).

The Authority's engineers Woodward and Kimball testified that (without regard to the factor of prediction distance) the successful operation of Norris Dam for both Mississippi and Tennessee flood control required a large storage capacity, substantially larger than required for a single Tennessee flood alone, because of the difficulty of releasing floodwater (r. 1790), and that having such large capacity, Norris could be successfully operated for Mississippi and Tennessee flood control and at the same time for low-water regulation (Woodward, r. 1786-1788, 1790; Kimball, r. 1851, 1880-1881). The witness Woodward testified that it was the "best method for flood control" (r. 1788) and of particular value for Mississippi protection (r. 1790). The witness Sargent, who has operated the same storage space at Sacandaga with complete success in controlling floods and in increasing low-water flow (see Crane, r. 1286), confirmed the views of the Authority's engineers (r. 1678-1681).

This method of operation is thus in the interest of flood control when Norris Dam is considered separately. Moreover, as the witness Floyd testified (r. 1891-1894), the available water thus stored in Norris Dam to maintain navigable depths by low-water releases permits the Authority to maintain or draw down the flood-control reservoirs on the main stream to a substantially lower level than would otherwise be consistent with the requirements of navigation. Thus, by coordinated development, the effectiveness of the mainstream dams for flood control is substantially increased, and the court unanimously so found (fdg. 69, r. 616, app. I, 43).

4. THE POWER PRODUCED AT THE TRIBUTARY DAMS IS LAW-FULLY ACQUIRED IN THE CONSTRUCTION OF WORKS FOR THE NATIONAL DEFENSE AND THE IMPROVEMENT OF GOV-ERNMENT-OWNED PROPERTY.

As pointed out in the statement (supra p. 47), the release of water from the tributary dams during the low-water season greatly enhances the value and usefulness of the Government properties at Muscle Shoals for the national defense (fdg. 72, r. 617, app. I, 45). Both under its war powers and under its power to maintain and improve the property of the United States, Congress was authorized to construct the tributary dams, even apart from the important function which they perform in the improvement of navigation and the control of floods. The trial court specifically held that the constitutional authority to construct Norris Dam exists under the national-defense powers in

addition to the other constitutional powers (r. 559, app. I, 133).

An analogous exercise of the power under the property clause is the improvement of the arid public lands of the United States pursuant to the Reclamation Act. For that purpose reservoirs have been constructed to store water during flood season and release it for irrigation during low-water season. This Court has recognized that "The Government incurs heavy liability in providing water for these lands" (Irwin v. Wright, 258 U.S. 219, 231). The validity of the extensive projects undertaken pursuant to the Reclamation Act for the improvement of the property of the United States cannot be doubted. See United States v. Hanson, 167 Fed. 881 (C.C.A. 9th, 1909); Kansas v. Colorado, 206 U.S. 46, 92.

5. APART FROM THE FOREGOING CONSIDERATIONS, THE WATER POWER IS LAWFULLY ACQUIRED; CONGRESS MAY DETERMINE THE SIZE OF THE PROJECTS REQUIRED FOR NAVIGATION AND FLOOD CONTROL AND THE MODE AND MANNER OF THEIR USE; AND ANY WATER POWER ACQUIRED IN THE OPERATION OF SUCH PROJECTS IS THE PROPERTY OF THE UNITED STATES.

What has been said above sufficiently demonstrates, we believe, that the power produced at the projects of the Authority is necessarily created in the operation of works having a bona fide and substantial relation to the improvement of navigation, the control of destructive floods, and the national defense. The power generated is thus the property of the United States, even on the narrow interpretation of the decisions advanced by appellants. It is clear, however, that no

such showing need be made. The decisions of this Court establish that in the construction of works for lawful purposes, it is for the Congress to determine the size of the project and the mode and manner of its use. And any water power acquired in the operation of such projects is the lawful property of the United States. Green Bay & Miss. Canal Co. v. Patten Paper Co., 172 U.S. 58, rehearing denied, 173 U.S. 179; United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53; Arizona v. California, 283 U.S. 423, 456. See also Buchanan v. United States, 78 Ct. Cl. 791 (1934), cert. denied, 294 U.S. 723.

Appellants' principal reliance is a dictum in the opinion of this Court in Kaukauna Co. v. Green Bay & Miss. Canal Co., 142 U.S. 254. Appellants ignore the subsequent decision in Green Bay & Miss. Canal Co. v. Patten Paper Co., supra. In that case this Court upheld the right of the United States, as owner of a dam and canal used for the storage and diversion of water through the navigation canal, to control and dispose of all the water power thereby created, even though it was established by findings of the State court, from which the case was appealed, that only 1% of the flow of the stream diverted through the navigation canal was required for navigation, the remaining 99% being diverted "ex industria, for the purpose of creating a water power" (Green Bay & Miss. Canal Co. v. Kaukauna Water Power Co., 90 Wis. 370, 371 (1895)).24 It was the power thus created which was

It should be noted that in addition to creating a water power by the diversion of water through the navigation canal, the dam also created a slack-water pool for navigation. As to the power thus created by the slack-water pool, even the State court held that it was "in a true sense, incidental to the erection of the dam" (90 Wis. at 401).

held "incidentally created" (172 U.S. at 68; 173 U.S. at 190).

The same problem was presented in United States v. Chandler-Dunbar Water Power Co., supra. An act of March 3, 1909 (35 Stat. 815), authorized the Secretary of War to condemn property for navigation improvements and to lease any excess of water power over the needs of the Government resulting from the navigation works constructed. In condemnation proceedings by the United States the company claimed damages for the taking of water-power rights in excess of navigation needs, contending, among other things, that in authorizing the lease of the water power the act authorized a taking of private property for commercial use. The district court found as a fact that it was necessary to utilize only a small portion of the total flow of the river for existing navigation purposes in connection with the canal. (See record in No. 783, October Term, 1912, at 330, and the opinion of the district court, id. at 408.) This objection was disposed of by this Court in these words:

If the primary purpose is legitimate, we can see no sound objection to leasing any excess of power over the needs of the Government. The practice is not unusual in respect to similar public works constructed by state governments [229 U.S. at 73, citing Kaukauna Co. v. Green Bay & Miss. Canal Co., 142 U.S. 254, 273].

This settled principle was reaffirmed in Arizona v. California, supra. In that case it was urged that the

construction of Boulder Dam, with its reservoir and power house, was undertaken for the purpose of irrigating private lands and generating power, the project being larger than required for any legitimate purpose of the Government. Even the navigability of the river was denied by the averments of the bill and the interstate compact. Nonetheless, the project was upheld on demurrer to the bill, the Court taking judicial notice that the Colorado was navigable and observing that "the means which the Act provides are not unrelated to the control of navigation" (283 U.S. at 455-456). "Whether the particular structures proposed are reasonably necessary," the Court added, "is not for this Court to determine [citing authorities]. And the fact that purposes other than navigation will also be served could not invalidate the exercise of the authority conferred, even if those other purposes would not alone have justified an exercise of Congressional power" (id. at 456).25

In Buchanan v. United States, supra, it was alleged that a federal navigation and power dam had been con-

The Boulder Canyon Project Act (45 Stat. 1057) imposed as a condition precedent to the construction of the project works the execution of contracts by the Secretary which would be adequate in his judgment to reimburse the United States for costs of the project. The bill of complaint filed by Arizona in that case pointed out that prior to the suit the Secretary had concluded a fifty-year contract with the Metropolitan Water District of California for the sale of electric energy (record in No. 19, Original, October Term, 1931, at 36). In an appendix to the bill of complaint were set out so-called "Power Regulations of the Secretary of the Interior," which described additional contracts between the Secretary and the city of Los Angeles and the Southern California Edison Company providing, among other things, that the company and city should act as "generating agencies" and transmit energy to certain prospective purchasers who would contract directly with the Secretary for the purchase of electricity (id. at 90-91, 108-109). Allocations for the purchase of electricity had been made by the Secretary to eleven municipalities (id. at 96). The bill of complaint urged that the purpose of the project was to put the Government in "the business of generating and selling electric power" (id. at 31).

structed several feet higher than required for navigation, and compensation was sought for the taking of lands to the extent that they were overflowed by the excess taking. Demurrer was sustained on the authority of the *Chandler-Dunbar* case (78 Ct. Cl. at 794-795). This Court denied certiorari (294 U.S. 723).

There is no occasion in this case to overturn a principle which has been settled for half a century. A narrower construction of the Constitution, we submit, would require the Congress to destroy the water resources of the great navigable rivers or abandon their development for legitimate federal purposes.

The development of the Tennessee, or any other river, for navigation and flood control cannot be divorced from its development for other and inseparable uses. This is a well-settled principle of conservation. The reports of the Inland Waterways Commission, the National Conservation Commission, and the National Waterways Commission, created by President Theodore Roosevelt and the Congress, all recomized the intimate interrelation between navigation and flood control and other water uses. They each recommended that every water-development project for any one use should be planned with relation to its potential use for other related functions in order to conserve the water resources. In this manner, projects which might be uneconomic when considered for one purpose may become economically justified when used to serve multiple functions. (See Preliminary Report of the Inland Waterways Commission, S.Doc. 325, 60th Cong., 1st sess., pp. 21-25: Report of the National Conservation Commission, S.Doc. 676, 60th Cong., 2d sess., p. 27; Preliminary Report of United States National Waterways Commission, printed as appendix I to Final Report of National Waterways Commission, S.Doc. 469, 62d Cong., 2d sess., p. 82 (see app. II, 98-107)).

These principles have long been embodied in all federal legislation relating to water development under federal jurisdiction. The legislation respecting the licensing of private developments does not require extensive comment here, but it may be worth noting that under section 10 of the Federal Water Power Act of 1920 (41 Stat. 1063) all licenses are conditioned as follows:

That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the commission will be best adapted to a comprehensive scheme of improvement and utilization for the purposes of navigation, of water-power development, and of other beneficial public uses; and if necessary in order to secure such scheme the commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval [p. 1068].

The same principles are particularly appropriate where the Federal Government itself undertakes to develop navigable rivers for legitimate ends. Included in the *Final Report of the National Waterways Commission*, Senate Document No. 469, 62d Congress, 2d session, page 135, is a study of a suggested system of

reservoirs for Mississippi flood control based on the principle that while reservoirs for flood control alone may involve prohibitive costs, when used for navigation and power as well they may be economically justified. The Chairman of the Senate Committee on Agriculture and Forestry (from which the Tennessee Valley Authority Act was reported) defended the construction of the Cove Creek (now Norris) Dam for Mississippi flood control on these grounds. (See app. II, 102; cf. Tennessee Valley Authority Act, sec. 14). These views have gained general acceptance in practice.

While power possibilities were overlooked at the time of the passage of the Reclamation Act of 1902 (32 Stat. 388), the act was amended in 1906 to permit the development of power in connection with irrigation projects when "an opportunity is afforded . . . under any such project" (34 Stat. 116, 117), and in 1912 the Congress authorized the Secretary of War to make provision for the future development of electricity at all navigation dams whenever appropriate (37 Stat. 201, 233). The scope of the surveys of the Army Engineers was broadened by the act of March 3, 1925 (43 Stat. 1186), in order to permit consideration of potential river developments for navigation in combination with the other related uses, including water power and flood control.

The most significant illustrations of the adoption of these principles are the great multiple-use projects established in the last ten years, of which the Boulder Dam is, of course, the outstanding example. Eminent engineering authority may be cited for the view that "the multiple-use reservoir is designed to play an increasingly important role in the future," and this for three related reasons: (1) reservoirs for flood control alone are too costly for any but the most densely populated and industrialized area; (2) the division of cost among several interests promotes the economic feasibility of reservoir projects; (3) the waste of floodwaters is at variance with the modern concept of water conservation. (See app. II, 98-113.)

These considerations are particularly applicable to the case at bar. The evidence shows that, as is true with respect to most rivers, in order to conserve the waters of the Tennessee for any beneficial use, storage reservoirs are required to regulate the sharp variations of stream flow from flood season to low-water period (fdg. 93, r. 621, app. I, 51). The central fact is that the sites essential for the necessary reservoirs are strictly limited in number, and those required for flood control frequently coincide with those necessary for the development of the river for other purposes (ibid.). To utilize these sites for "dry" reservoirs alone would foreclose their development for any other use (ibid.) and, so complainants' witnesses testified, would not be economically justifiable for flood control alone (Kelly, r. 1389). The construction of low movable-wicket dams on the main stream would prevent the use of high dams for flood control and other purposes (Watkins, r. 1547).

It was on these grounds that the district engineer made the following recommendation in House Document No. 328: Sites at which storage can be developed economically are limited. Some of these sites are in the navigable portion of tributaries and some are located in headwaters in the nonnavigable sections of streams. On account of the great importance of reservoir storage to the development of the Tennessee River and its tributaries for navigation, water power and flood control, steps should be taken to see that all available sites are conserved for the development of the river and its tributaries and that such sites are developed to the most economic height and drawdown required for the development of the entire system [p. 64].

The projects of the Authority are the only projects which adequately develop the available sites to conserve the water resources of the Tennessee River system for navigation, flood control, power, and other beneficial uses (fdg. 93, r. 621, app. I, 51). The Congress, we submit, may authorize the full utilization of the necessary sites wherever the projects are reasonably required for navigation and flood control. The acceptance of the narrow views advanced by the appellants would, in all practical effect, deny to the Congress the means of effecting the development of the Tennessee River for navigation and flood control.

Neither at the time of the enactment of the Tennessee Valley Authority Act nor since has there been any reasonable prospect that a comprehensive development of the Tennessee River and its tributaries for the combined purposes of navigation and flood control in the Tennessee and Mississippi River basins could be

obtained in any way except by the construction of high dams by the United States Government or some agency thereof. The court unanimously so found (fdg. 67, r. 614, app. I, 41). If the improvement of navigation and control of floods were the only ends in view, appellants would not be here to object. They insist, however, that the Congress must permanently commit the resources of the river to be destroyed for other uses or abandon the development of the river for any purpose. No such choice, we submit, is required by the Constitution.

The decisions of this Court establish that if the projects are not unrelated to navigation or flood control, the Congress may provide appropriate means to insure their practical execution; the courts will not inquire whether the means thus provided are reasonably required for navigation and flood control alone. Arizona v. California, supra; United States v. Chandler-Dunbar Water Power Co., supra; Buchanan v. United States, supra. (See pp. 96-99, supra.) The same principle has been recognized in other types of federal water developments, notably in relation to reclamation. Thus in Burley v. United States, 179 Fed. 1 (C.C.A. 9th, 1910), it was held that where the controlling object of the project is to reclaim public lands, the Government has the power to provide facilities for the reclamation of interrelated private lands in order to assure the practicability and economic feasibility of the project.

A consideration of the congressional power to make appropriations for the general welfare leads to the

same conclusion. The statute under consideration, as we have said, is not a regulatory measure but a public improvement carried into effect solely by means of the expenditure of public funds. The ends to be served are clearly for the general welfare of the Nation. The husbandry of our physical resources is second only to the protection of our human resources in the scale of national interests. Cf. Steward Mach. Co. v. Davis, supra. On this question, at least, the Nation speaks with one voice. The general interest would be indubitable if the Congress had sought to extend the present undertaking to all the major regions of the United States. The Tennessee Valley Authority project is nonetheless national and not local in character, though the Congress has conservatively determined to test its feasibility on one river draining parts of seven southeastern States.

No interests of the States are invaded. In the court below it was argued that the Government's contention disregarded the principle that the States held title to the waters of navigable as well as nonnavigable rivers, subject only to the paramount interests of the Federal Government for navigation purposes. Cf. Pollard's Lessee v. Hagan, 3 How. 212; Shively v. Bowlby, 152 U.S. 1; Port of Seattle v. Oregon & W.R.R., 255 U.S. 56; Wisconsin v. Illinois, 278 U.S. 367. The same argument was urged and rejected in the Ashwander case, supra at 337-338. Any notion of a conflict between the National Government and the States in the utilization of the resources of the river is illusory. The development of the Tennessee River and its tributaries

by the State or its licensees for power or for any other purpose is dependent on the utilization of sites which the Federal Government must necessarily preëmpt in providing the necessary flood-control and navigation facilities. If the Federal Government were to develop these sites for flood control or navigation alone, it would be physically impossible for the State or its licensees to develop the river for any other purpose, even if they could obtain the necessary license from the Federal Government. (See supra pp. 102-103.) There is thus no question of conflict in this case between the interests of the Federal and State Governments. The sole question is whether the resources of the Tennessee River may be developed by the Federal Government or not at all.

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THE MEANS CHOSEN BY CONGRESS IN THE TENNESSEE VALLEY AUTHORITY ACT FOR THE DISPOSITION OF POWER ARE VALID.

The water power created by the projects of the Authority is the property of the United States, may be converted into electric energy, and all of the electricity so acquired may be disposed of under the property clause of the Constitution. Ashwander v. Tennessee Valley Authority, 297 U.S. 288. It is the position of the Government that under the decision in the Ashwander case and under the settled principles of constitutional law, the Congress may lawfully authorize the sale of such property to municipalities, rural cooperatives, and

industrials, as well as to private utilities, and may lawfully authorize the acquisition of the necessary facilities for the generation, transmission, and sale of the power. Separate and subordinate questions are raised with respect to the provisions in the contracts between the Authority and the municipalities and rural cooperatives concerning resale rates and related conditions of service. The Government contends that the appellants have no sufficient legal interest to question the validity of these provisions, and that, in any event, the provisions in question are valid. Neither the sale of power nor the terms of the contracts, it will be shown, impair the exercise of the States' police power or in any way invade the rights reserved to the States under the tenth amendment.²⁶

1. THE CONGRESS MAY LAWFULLY AUTHORIZE THE SALE OF GOVERNMENT-OWNED POWER TO MUNICIPALITIES, RURAL COOPERATIVES, AND INDUSTRIALS, AS WELL AS TO PRIVATE UTILITIES, AND MAY LAWFULLY AUTHORIZE THE ACQUISITION OF THE NECESSARY FACILITIES FOR THE GENERATION, TRANSMISSION, AND SALE OF SUCH POWER.

The statute: The .ct declares it to be the policy of the Government, so far as practical, to distribute and sell the surplus power generated by the Authority "equitably among the States, counties, and municipalities within transmission distance" (sec. 11), a policy incorporated in this act after years of mature de-

No question is raised as to the power to acquire or operate steam plants. The steam plant at Muscle Shoals is not in operation (fdg. 197, r. 643, app. I, 83). As in the Ashwander case, no question is presented as to the operation of local distribution systems (fdgs. 106, 187, 193, r. 624, 641, 642, app. I, 56, 80, 82).

liberation²⁷ and in accordance with the traditional principle that the benefits of public property should be broadly distributed. It is further declared to be the purpose of Congress to obtain revenues from the sale of the power which might otherwise be wasted and thus to liquidate some part of the cost of the projects (sec. 9a), an established Government policy in the disposition of power produced at federal water developments.²⁸

The board is accordingly authorized to contract for the sale of surplus power to States, public agencies, corporations, and others, and is required to give preference to public agencies and quasi-public membership corporations in accordance with familiar precedent (sec. 10).²⁹ Special provision is made for the service of rural areas "not otherwise supplied" at reasonable rates (*ibid.*), presumably for the reason that the rural areas in the Tennessee Valley were almost entirely without the benefit of electric energy prior to the enactment of the Tennessee Valley Authority Act (Hapgood, r. 2147) and furnished an obvious market for the Government's surplus power (fdgs. 234,

See H.Con.Res. 4, 69th Cong., 1st sess.; Hearings before Senate Committee on Agriculture and Forestry, 68th Cong., 1st sess., pp. 301-309, 340-345, 373-386, 949-950; S.Rept. 831, 67th Cong., 2d sess. (pt. 1) pp. 31-32; S.Rept. 678, 68th Cong., 1st sess., p. 12; S.Rept. 672, 69th Cong., 1st sess., p. 12; 67 Cong. Rec., 69th Cong., 1st sess., p. 4986.

See veto message of President Theodore Roosevelt, 36 Cong. Rec., 57th Cong., 2d sess., p. 3071; Annual Report of the Commissioner of Reclamation (1932) pp. 12-17; H.Doc. 395, 73d Cong., 2d sess., p. 54; cf. Boulder Canyon Project Act (45 Stat. 1057).

For other examples of similar preference provisions regarding power, see section 5 of the Reciamation Act of 1906 (34 Stat. 116, 117) and section 5 of the Boulder Canyon Project Act (45 Stat. 1057, 1060). The employment of such provisions to assure "a sound competitive condition" and to prevent the power from being "monopolized" was noted in the committee reports on the Boulder Canyon Act (see H.Rept. 918, 70th Cong., 1st sess., pp. 22; S.Rept. 592, 70th Cong., 1st sess., pp. 26-27).

235, r. 651, app. I, 94). Sales to industry are made a secondary purpose in order to secure revenue and a high load factor and "permit" rural and domestic consumption at low rates which will encourage increased use (sec. 11). The board is authorized to acquire transmission lines "In order to place the board upon a fair basis for making such contracts and for receiving bids for the sale of such power" (sec. 12).

The power supply of the Authority: The firm-power capacity of all the dams of the Authority now constructed or authorized for construction is 570,000 kw at 60% load factor with all the generating units installed or authorized for installation (fdg. 94, r. 621, app. I, 51). This amount, as has been noted, is less than the potential shortage of the private utilities in this area predicted for the date of the installation of the Authority's generating facilities (fdg. 238, r. 652, app. I. 95). The statements in appellants' brief (see, e.g., pp. 154-157) as to the amount of power to be generated at the projects of the Authority are based on fanciful assumptions of complete installations (whether or not authorized) at dams not constructed or even authorized, including Fontana, and unified operation with the plants of the Aluminum Company of America (Wessenauer, r. 2172, 2179-2181), and (apparently) all possible dams at any of the 149 sites located on the Tennessee River system by the Corps of Engineers in House Document No. 328, whether or not any such dams would be of any value for navigation and flood control.

The market for power at the dam sites: As complainants' witness Miller testified, the market for the Authority's power at the dam sites is limited to the demand of complainant utilities and such industries as might locate there (r. 1114; cf. fdg. 178, r. 640, app. I, 78). The only transmission lines (other than those of the Authority) connected with any of the Government dams are owned by the Alabama Power Company, The Tennessee Electric Power Company, and the Southern Tennessee Power Company, all subsidiaries of the Commonwealth & Southern Corporation (fdg. 177, r. 639, app. I, 78). Not only is the market at the dam sites thus dominated by three affiliated Commonwealth and Southern companies, but the market for at least 100 miles from any of the dams is likewise exclusively controlled by the Commonwealth and Southern companies and, to a much smaller degree, the Electric Bond & Share Company (ibid.).30

Contracts executed by the Authority for the sale of power: Under these circumstances and pursuant to the preference provisions of the act, the Authority has entered into contracts with a number of municipalities, many of which have maintained their own distribution or generating and distribution facilities (fdgs. 203-205, r. 644-645, app. I, 84-85), and a group of rural cooperatives serving customers which had theretofore

Since the trial, the Tennessee Public Service Company has sold its facilities to the city of Knoxville and the Authority and has withdrawn from this litigation. The Memphis Power & Light Company is now negotiating the details of a similar contract with the city of Memphis and the Authority and may have withdrawn from this litigation at the time this appeal is heard. These two companies were the principal members of the Electric Bond and Share system in this area affected by the operations of the Authority.

received no electric service of any character (fdgs. 206, 207, r. 645, app. I, 85, 86). In addition, the Authority has contracted for the sale of large amounts of power, both firm and secondary, to certain private utilities (fdgs. 128, 157, r. 629, 634, app. I, 62, 70) and large electrochemical and electrometallurgical industries representing new electric business in this area not heretofore served by any of appellants (fdg. 151, r. 633, app. I, 69). The Authority has sold large amounts of power to the Commonwealth and Southern companies (fdgs. 196, 213, r. 643, 646, app. I, 82, 87) and is even now transmitting and selling power to the Alabama Power Company for distribution in northern Alabama (fdg. 128, r. 629, app. I, 62; Barry, r. 870).

Electric facilities acquired and constructed by the Authority: The Authority has installed or provided for the installation of generating facilities (r. 2180) and has constructed about 400 miles of plant tie lines to interconnect several power plants in order to promoteeconomy of operation and make the power available wherever needed (fdgs. 179-181, r. 640, app. I, 78-79). In addition, the Authority has constructed or acquired about 1,100 miles of marketing transmission lines (fdg. 183, r. 640, app. I, 79). All of these lines are necessary to serve the customers of the Authority (fdg. 186, r. 641, app. I, 80); and while it is not material, it may be noted that they do not constitute duplications of existing facilities (fdg. 184, r. 640, app. I, 79). Appellants' repeated statement (br. 158) that the Authority will require 15,000 miles of marketing transmission lines is not only of no legal significance but is

based on their erroneous assumption as to the potential power and, necessarily, on arbitrary assumptions as to the possible location and character of possible future customers of the Authority which have neither executed nor even negotiated contracts for service (Moreland, r. 1453; cf. Hapgood, r. 2146, 2148). It may be pointed out that appellants' contention as to the potential length of the Authority's lines is likewise grossly exaggerated. While 250 miles is a technically feasible transmission distance, even complainants' prophet Moreland did not predict any line for the Authority longer than "somewhat beyond the 150 mile zone" (r. 1452-1453), and, in fact, the Authority's largest marketing line now is only about 100 miles in length (see def. ex. 136, r. 4175, and def. ex. 136A in Reproductions of Certain Original Exhibits Submitted by Appellees).

Character of the Authority's method of disposition: It is of fundamental importance that the Authority's power contracts provide primarily for service at wholesale to municipalities and cooperatives. With minor exceptions the only ultimate consumers served directly by the Authority are a few large electrochemical and electrometallurgical industries (fdgs. 106, 187, r. 624, 641, app. I, 56, 80) purchasing large blocks of primary and secondary power (fdgs. 148-154, r. 632-633, app. I, 68-70), which cannot be served through any distributor or intermediary (fdgs. 155, 157, r. 634, app. I, 70). 31

The minor exceptions are a few rural and industrial customers in the so-called ceded area covered by the contract of January 4, 1934, in the vicinity of Norris and Wilson Dams, which are served either by rural lines purchased from the Alabama Power Company and The Tennessee

The Ashwander decision: The decision of this "Court in the Ashwander case, we submit, fully sustains the power of Congress to authorize such sales of power and the acquisition of the necessary electric facilities. In that case the Court upheld the validity of a contract (dated January 4, 1934, and sometimes referred to in the record and in this brief as the contract of January 4) providing for sale to the Authority of certain transmission lines of the Alabama Power Company serving a number of municipalities in northern Alabama, as well as auxiliary lines serving rural and small industrial customers. This Court held (1) that the powerlawfully acquired by the Government is the property of the United States and all of it may be sold, and (2) that the Government may acquire the transmission and other facilities necessary to market the power; it is not required to waste the power or to sell it only to private utilities at the dam site.

This Court said:

The United States owns the coal, or the silver, or the lead, or the oil, it obtains from its lands, and it lies in the discretion of the Congress, acting in the public interest, to determine of how much of the property it shall dispose.

We think that the same principle is applicable to electric energy [297 U.S. at 336].

Electric Power Company or lines of identical character constructed by the Authority (fdgs. 106, 187, r. 624, 641, app. I, 56, 80). The only electric service provided by the Authority under its contracts with municipalities and cooperatives is a wholesale service. The distribution service is performed by the municipalities and cooperatives with their own facilities (fdgs. 130, 131, 138, 140, 146, 147, r. 629, 631, 632, app. I, 63, 66-68).

With respect to the method of disposition, this Court held:

The transmission lines which the Authority undertakes to purchase from the Power Company lead from the Wilson Dam to a large area within about fifty miles of the dam. These lines provide the means of distributing the electric energy, generated at the dam, to a large population. They furnish a method of reaching a market. The alternative method is to sell the surplus energy at the dam, and the market there appears to be limited to one purchaser, the Alabama Power Company, and its affiliated interests. We know of no constitutional ground upon which the Federal Government can be denied the right to seek a wider market [id. at 339].

It is difficult to discover any ground of distinction between the means of disposition set forth in this record and those approved by this Court in the Ashwander case. As the Circuit Court of Appeals for the Sixth Circuit observed in its opinion dissolving the preliminary injunction granted by the district court:

in that the authority of the Congress to enact the statute in certain of its aspects, and to authorize thereby certain important transactions in respect to the construction of Wilson Dam, and to the sale and distribution by means of transmission lines of the electric energy there generated, has already been sustained by the Supreme Court, and that other acts and transactions here alleged to illustrate the sweep of the challenged power

program are not readily to be distinguished from those heretofore validated [90 F. (2d) 885 at 892].

After exhaustive consideration of the evidence, the trial court reached the same conclusion. A specific analysis of the facts amply confirms the conclusion of these two courts.

The customers with whom the Authority has contracts include only the classes of customers served by the properties in Alabama transferred under the contract of January 4 (def. ex. 143, r. 4192-4193). The record in this case shows that the Authority has contracted to sell power to

- (a) private utilities
- (b) municipalities and rural cooperatives
- (c) industrial customers
- (d) rural residents in the vicinity of the dams

(fdgs. 129, 198, 199, r. 629, 643, app. I, 62, 83) and that it is using transmission lines, substations, and rural lines, which it has constructed or acquired, to deliver the electricity to these customers (fdgs. 183, 185, 187, r. 640, 641, app. I, 79, 80). The contract of January 4 provided for

- (a) the sale and delivery of power to private utilities (def. ex. 143Λ, secs. 8, 9, r. 4201-4202)
- (b) the conveyance of "all franchises, contracts and going business... with all present customers attached" (id., sec. 4, r. 4197-4198) to transmission lines and substations serving va-

rious municipalities (id., ex. B at sheet 2, r. 4215) and

- (c) the assignment of contracts with certain industrial customers (id., ex. B at sheets 2, 3, r. 4215-4216)
- (d) the conveyance of rural lines serving a number of rural residents and communities (id., ex. B at sheet 5, r. 4217)

In addition to this complete parallel as to the types of customers, it is beyond question that all of the marketing facilities constructed and operated by the Authority for the disposition of electric energy, namely, transmission lines, substations, and rural lines (cf. fdgs. 183, 185, 187, r. 640, 641, app. I, 79, 80), are similar in character and function to those classes of facilities purchased by the Authority under the contract of January 4 from the Alabama Power Company (fdgs. 174, 192, r. 639, 642, app. I, 76, 81). The facilities in the Ashwander case were used for the transmission of power to municipal distribution systems in 12 cities, 1,000 rural customers, and 48 industrial customers (fdg. 174, r. 639, app. I, 76).

A large part of the Authority's power is being sold to serve new electric demand. The trial court found that there are unserved potential markets for electric energy in unserved rural areas near the projects of the

A reference to the chart which is defendants' exhibit 137 (see Reproductions of Certain Original Exhibits Submitted by Appellees) will disclose the similarity between the electrical facilities now owned by the Authority and the properties sold to it in Alabama under the contract of January 4. For a precise summary of the lines purchased under the contract of January 4 and those constructed by the Authority, see exhibits B, C, and E to defendants' exhibit 136, which is a stipulation by the parties (r. 4177-4179, 4190-4183, 4184).

Authority; that the percentage of rural electrification in the States which make up the Tennessee River basin is small, and that in 1933 it ranged from 0.8% in Mississippi to 7.9% in Virginia; that a great majority of the so-called rural customers on lines of complainants are in towns of a population of a hundred or more, or within six miles of a transmission substation; and that there was little area-wide rural electrification (fags. 234, 235, r. 651, app. I, 94). The trial court found that only two customers of the total number of 16,108 rural customers receiving service as of October 31, 1937, from the fifteen rural cooperatives purchasing power at wholesale from the Authority had ever received electric service of any kind from the complainant companies, except for customers located in the ceded area and served by lines sold to the Authority (fdg. 206, r. 645, app. I, 85). As Judge Sibley observed in denying an injunction to restrain the construction of rural lines by the Authority,

Thus to encourage the development of a new market for electricity rather than to invade an old one seems to be most considerate of existing interests and not of any detriment to the state [Georgia Power Co. v. Tennessee Valley Authority, 14 F.Supp. 673, 676 (N.D.Ga., 1936)].

The industrial concerns with which the Authority has contracts, apart from those in the "ceded area" served by the lines acquired under the contract of January 4, are certain new industries that have recently constructed new plants in the area or expanded their

prior operations (fdgs. 150, 151, r. 633, app. I, 69). The Authority is selling large blocks of firm and secondary power to these customers, which is delivered at voltages comparable to those at which delivery made to the municipalities (fdgs. 149, 157, 158, r. 633, 634, 635, app. I, 68, 70, 71). The reasonableness and, indeed, the practical necessity of these sales as a means of disposing of the surplus power is apparent from a consideration of section 11 of the statute, together with the findings of the court (fdgs. 153-156, r. 633-634, app. I, 70). Section 11, among other things, provides that

dary purpose, to be utilized principally to secure a sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity.

The trial court found upon the basis of the undisputed testimony that all of the large industrial customers have contracted to purchase large amounts of secondary power, which is that class of power the delivery of which the seller may interrupt during periods specified in the contract (fdgs. 153, 154, r. 633, app. I. 70). These sales of secondary power will increase the load factor and hence the efficiency of the Authority's operations (fdg. 154, r. 633, app. I, 70). It is not feasible to sell this class of power to such industrial customers through a retailer or intermediary (fdg. 155, r.

634, app. I, 70). It was further found that the market for this class of power is limited to such large manufacturing plants and utility companies (fdgs. 153-156, r. 633-634, app. I, 70), and that the complainants do not maintain excess capacity and facilities for service to loads of the large and unusual size of these industrial concerns (fdg. 152, r. 633, app. I, 69).

It would be difficult to suggest a more obvious market for the disposition of Government power. As Judge Sibley said with respect to the unserved rural areas, the sales to these industries are "most considerate of existing interests" (14 F.Supp. at 676). In the many years during which the question of the disposition of the Muscle Shoals power was under consideration by the Congress, numerous bids were submitted by similar industries to lease the Wilson Dam power,33 and no doubt was ever expressed as to the constitutional validity of the proposals. Indeed, all of the representatives of the Commonwealth and Southern companies testified during the hearings before the House Committee on Military Affairs that they would be willing to see the Government sell its power to such industries, although their suggestion was limited to industrials located along the river which could be served without construction of transmission facilities which might be used to compete for the power companies' existing markets. See Hearings before the House Committee on Military Affairs, 73d Cong., 1st

See offer of Henry Ford, H.R. 518, 68th Cong., 1st sess., sec. 16; offer of Union Carbide Co., S.Doc. 105, 68th Cong., 1st sess., sec. 13, p. 8; offer of American Cyanamid Co., H.R. 16,614, 69th Cong., 2d sess., sec. E (3); offer of Farmers Federated Fertilizer Corporation, S. 4632, 69th Cong., 2d sess., sec. 84.

sess., pp. 129, 136, 155, 177, 199. The denial of constitutional authority to dispose of the Government's power to such industries would, as this Court observed in the *Ashwander* case, lead to absurd consequences (297 U.S. at 336-337).³⁴

In this case, as in the Ashwander case, the method of disposition is necessary to avoid a private monopoly of the Government's property. As this Court held in the Ashwander case, the Government is not required to sell its power to the Commonwealth and Southern companies or allow it to waste. That case did not establish a novel precedent. The decisions of this Court uniformly sustain the power of Congress to prevent the waste or monopoly of public property and to make a widespread distribution of the benefits.

The prior decisions: The water power created by dams of the Government, like other property of the United States, is "held in trust for all of the people" (United States v. Trinidad Coal Co., 137 U.S. 160, 170; cf. Light v. United States, 220 U.S. 523, 537; United States v. Beebe, 127 U.S. 338, 342; Camfield v. United States, 167 U.S. 518). And "how that trust shall be administered . . . is for Congress to determine" (Light v. United States, supra at 537; cf. Ruddy v. Rossi, 248 U.S. 104, 106-107). "The disposal must be left to the discretion of Congress" (United States v. Gratiot, 14 Pet. 526, 538). The administration of this trust to avoid monopoly and permit a widespread utilization of public proper-

The sale to industries has been an important market for the disposition of power produced at the federal irrigation projects (see Annual Report of the Commissioner of Reclamation (1932) p. 13).

ties has been repeatedly sustained by this Court. The Congress is clothed with the power and charged with the duty to protect its properties against monopoly and waste (United States v. Trinidad Coal Co., supra; Camfield v. United States, supra; United States v. Shryock, 162 Fed. 790, 793 (C.C.S.D. Ohio, 1908); United States v. Hanson, 167 Fed. 881 (C.C.A. 9th, 1909)). As this Court observed in the Camfield case, supra, "it [Congress] would be recreant to its duties as trustee for the people of the United States to permit any individual or private corporation to monopolize them [public lands] for private gain" (167 U.S. at 524).

These principles govern the disposition of all natural resources owned by the United States. To enable the settlement of public lands in small tracts, the Congress may limit the size and sale price of tracts sold by the Government's grantees (Oregon & Calif.R.R. v. United States, 238 U.S. 393; cf. Causey v. United States, 240 U.S. 399; Ervien v. United States, 251 U.S. 41), and may undertake extensive reclamation projects to make the public lands "marketable and habitable" for small settlers (United States v. Hanson, supra at 883-884; Kansas v. Colorado, 206 U.S. 46, 92). This Court has recognized that "The Government incurs heavy liability in providing water for these lands" (Irwin v. Wright, 258 U.S. 219, 231). The capital for these great projects could have been supplied by private enterprise if the Government had been willing "to abandon our time-honored policy of inviting and encouraging small individual land holdings" and to turn over the public lands to private interests in sufficiently large tracts to render private projects economically feasible. But "no one contemplates so stupendous a price as this for irrigation development." The Reclamation Act in this view represents a choice of means, the refusal of Congress to resort to private agencies, and a determination that the Federal Government must undertake these projects in order to insure the success of its long-established policy.

Equally broad is the power of Congress to prevent such monopoly of mineral or other Government natural resources. From the beginning of our Government, the Congress has reserved valuable mineral lands from ordinary grants (Morton v. Nebraska, 21 Wall. 660; United States v. Sweet, 245 U.S. 563). In making specific disposition of mineral and timber lands, Congress has strictly limited the area open to entry by any one individual or association (13 Stat. 529; 16 Stat. 217; 17 Stat. 91; 17 Stat. 607; 29 Stat. 526). The purpose of these restrictions, as this Court has observed, "was, manifestly, to prevent monopolies" (United States v. Trinidad Coal Co., supra at 169; United States v. Munday, 222 U.S. 175, 181). The Congress may promote this policy by reserving the minerals from public lands and disposing of them by limited leases (United States

[&]quot;If we were willing to abandon our time-honored policy of inviting and encouraging small individual land holdings and were prepared to turn over all of the public lands under a large irrigation system to the control of a single individual or a corporation, we could undoubtedly secure the construction of extensive works which cannot be profitably constructed by private enterprise under present conditions, but no one contemplates paying so stupendous a price as this for irrigation development" (H.Rept. 794, 57th Cong., 1st sess. (pt. 1) p. 3).

v. Gratiot, supra), or it may mine and market the minerals directly (Ashwander v. Tennessee Valley Authority, supra).

These principles are clearly applicable in the instant case. The acquisition of generating and transmission facilities to serve municipal, rural, and industrial customers is no less reasonable than the construction and operation of dams, reservoirs, and canals and the appropriation of waters under State laws to make marketable the arid public lands. And, as this Court recognized in the Ashwander case, such method of disposition of Government-owned power does not differ in principle from the mining and marketing of minerals owned by the United States.

The scope of the property clause cannot be limited as appellants attempt to do by describing it as a "proprietary power." In the days of the settlement of this country it was the property clause that empowered the Congress "to convert waste places into permanent homes" (Ruddy v. Rossi, supra at 105), and by which "Empire was given a path westward and prosperous commonwealths took the place of a wilderness" (Oregon & Calif.R.R. v. United States, supra at 416). And when, at the turn of this century, the need for conservation gained national recognition, the property clause conferred the necessary powers to fashion the instruments needed for the husbandry of our Government-owned natural resources (Kansas v. Colorado, supra; Light v. United States, supra).

Nor is the appellants' argument advanced by calling the activities of the Authority a "business."

The argument is reminiscent of the contention made by the opponents of the Reclamation Act that "the United States is not a dealer in real estate . . . [or] a real estate improvement society, and has not the constitutional power to become such" (H.Rept. 794, 57th Cong., 1st sess. (pt. 2) p. 10). The mere fact that one of the incidental results is governmental activity in a field more commonly occupied by private corporations is not a reason for denying the existence of the power, a fortiori when the field is frequently occupied "The conduct of business by other public agencies. in competition with private interests may of course. be for a public purpose" (Emergency Fleet Corp. v. Western Union Tel. Co., 275 U.S. 415, 424-425; cf. Standard Oil Co. v. Lincoln, 114 Neb. 243 (1926), aff'd, 275 U.S. 504).

Examples of governmental activity which in their commercial aspects are similar to those now challenged are numerous and familiar. Among these, in addition to the establishment of banks (M'Culloch v. Maryland, 4 Wheat. 316; First National Bank v. Fellows, 244 U.S. 416; Smith v. Kansas City Title Co., 255 U.S. 180), are the leasing of lead mines on the public lands (United States v. Gratiot, supra); the ownership and operation of merchant ships (King County v. United States Shipping Board Emergency Fleet Corp., 282 Fed. 950 (C.C.A. 9th, 1922); Sloan Shippards Corp. v. United States Fleet Corp., 272 Fed. 132 (W.D.Wash, 1921); cf. Emergency Fleet Corp. v. Western Union Tel. Co., supra); the establishment of a federal housing corporation (New Brunswick v. United States, 276 U.S.

547); the establishment and operation of the Panama Railroad (Wilson v. Shaw, 204 U.S. 24); and the establishment of the parcel post in competition with private express companies (37 Stat. 557-559) and the postal savings system in competition with banks (36 Stat. 814).

In the disposal of its real property, the Government has long undertaken a "business" of great magnitude. It is worth recalling that the disposal of the public domain has involved an enterprise so extensive that it has given a now-familiar phrase to the language—"a land-office business."

The contention that the sale of power by the Government constitutes a "business" and is therefore unlawful was advanced in the Ashwander case and rejected by this Court:

The argument is earnestly presented that the Government by virtue of its ownership of the dam and power plant could not establish a steel mill and make and sell steel products, or a factory to manufacture clothing or shoes for the public, and thus attempt to make its ownership of energy, generated at its dam, a means of carrying on competitive commercial enterprises and thus drawing to the Federal Government the conduct and management of business having no relation to the purposes for which the Federal Government was established. The picture is eloquently drawn but we deem it to be irrelevant to the issue here. The Government is not using the water power at the Wilson Dam to establish any industry or business. It is not using the energy generated at the dam to manufacture commodities of any sort for the public. The Government is disposing of the energy itself which simply is the mechanical energy, incidental to falling water at the dam, converted into the electric energy which is susceptible of transmission. The question here is simply as to the acquisition of the transmission lines as a facility for the disposal of that energy [297 U.S. at 339-340].

The hypothetical cases suggested as analogies in appellants' brief (pp. 136-137) raise questions as to the extent to which the Government may process Government-owned property as a means to disposition. Since appellants concede that the Government may lawfully convert water power into electricity if the power is lawfully acquired, it is unnecessary to elaborate the obvious distinctions between the instant case and those suggested by appellants.

Appellants insist that the power to dispose of Government property is limited by the provisions of the tenth amendment. The relation of this amendment to the details of the methods of disposition is discussed fully *infra*, pages 134-154. In general, it should be observed, as this Court said in the *Ashwander* case:

To the extent that the power of disposition is thus expressly conferred, it is manifest that the Tenth Amendment is not applicable. And the Ninth Amendment (which petitioners also invoke) in insuring the maintenance of the rights retained by the people does not withdraw the rights which are expressly granted to the Federal Government [297 U.S. at 330-331].

The Authority's method of disposition is not invalidated by the tenth amendment.

Certainly, the Alabama Power Company [and its affiliates of the Commonwealth and Southern system] has no constitutional right to insist that it shall be the sole purchaser of the energy generated at the [Government dams] . . . that the energy shall be sold to it or go to waste [id. at 339].

2. THE API'ELLANTS HAVE NO STANDING TO CHALLENGE THE VALIDITY OF THE RESALE-RATE PROVISIONS CONTAINED IN THE CONTRACTS BETWEEN THE AUTHORITY AND MUNICIPALITIES AND COOPERATIVES; BUT IN ANY EVENT, THESE PROVISIONS ARE VALID.

The act authorizes the Authority to include in contracts with municipalities and cooperatives provisions establishing resale rates to be charged by the distributor (sec. 10). The authority of the statute is of general application, and, in fact, resale-rate provisions have been included in all such contracts (whether or not the distributor operates in a territory served by complainants), including those with municipalities which had theretofore owned and operated their own electric plants and cooperatives serving consumers theretofore without any electric service (fdg. 221, r. 648, app. I, 90). The general, the municipality or cooperative and the Authority agree upon the resale rates set forth in the contract. The Authority is required to agree to such modification as may be neces-

The contracts also contain provisions respecting such matters as the municipal accounting system and the collection of bills. There is no suggestion anywhere in appellants' brief that any of the contract provisions in question (other than those with respect to resale rates) have any regulatory effect on appellants' operations.

sary to maintain the contractor's distribution system on a "self-supporting and financially-sound basis," and the contractor agrees to use all surplus revenues to reduce rates. The rates may be changed at any time by agreement of the parties. (See, e.g., contract between the Authority and the city of Sheffield, Alabama, secs. 6, 7, comp. ex. 118, r. 2802, 2804-2805).²⁷

The appellants do not and cannot challenge the validity of these contract provisions under State law. Oppenheim v. Florence, 229 Ala. 50 (1934); Memphis Power & Light Co. v. Memphis, 172 Tenn. 346 (1937). The argument is, however, that the contract rates, which are substantially lower than those of appellants, in effect determine the rates which appellants may charge, and that appellants have a right to operate free from federal regulation and may, therefore, question the power of Congress to contract with municipalities and cooperatives with respect to the resale rates to be charged by the distributor.

The argument overlooks the fundamental fact that the muncipalities and cooperatives may charge whatever rates they please and are at liberty to put into effect the rates set forth in the contracts with the Authority even in the absence of any agreement. So

In a few of the early contracts it was provided that the initial rates set forth in the contracts could be modified by the Authority. In all the contracts, however, the Authority is required to agree to such rates as may be required to maintain the distribution system on a "self-supporting and financially-sound basis," and the contractor agrees to use all surplus revenues to reduce rates. The rate schedule set forth in the contracts is thus in all cases merely an initial rate schedule, the continuing obligation of the parties being to maintain rates which are neither higher nor lower than those necessary to maintain the distribution system on a financially sound basis. See, e.g., contract between the Authority and the city of Athens, comp. ex. 117, r. 2729, 2731.

far as appears, not only do the municipalities and cooperatives approve the rates they propose to charge under the contracts with the Authority but they do not wish to change them. Any advantage which complainants might have derived if the municipalities and cooperatives had formulated higher rates in the absence of the agreement with the Authority would have been a mere incident of the right of municipalities and cooperatives to charge such rates in their discretion. Any disadvantage to complainants by virtue of the fact that the municipalities and cooperatives have put into effect rates lower than complainants is likewise a mere incident of the same right of the municipalities and cooperatives. Appellants cannot insist upon the possible advantage or complain of the disadvantage. Edward Hines Trustees v. United States, 263 U.S. 143, 148; Sprunt & Son v. United States, 281 U.S. 249, 254-256.

It is immaterial that the resale rates are put into effect pursuant to agreement with the Authority. Stated most favorably for appellants, the case is no different from that which would be presented if the municipalities and cooperatives promulgated these rates pursuant to, or with the approval of, an invalid order of a regulatory commission. In such a situation, it is settled, appellants would have no right to complain. In Edward Hines Trustees v. United States, supra, the plaintiffs, manufacturers and shippers of lumber, brought suit to annul an order of the Interstate Commerce Commission which abolished a penalty charge on lumber held by carriers at reconsignment

points. The penalty charge had been of substantial benefit to the plaintiffs because of the burden which it placed upon its competitors, and its removal threatened a substantial loss of business. The order was challenged on the ground that it exceeded the power of the Commission. This Court held, however, that the plaintiffs were without standing to challenge the validity of the order. The Court said:

It is not alleged that the carriers wish to impose such charges and, but for the prohibition contained in the order, would do so. For aught that appears carriers are well satisfied with the order entered. Cancellation of a charge by which plaintiffs' rivals in business have been relieved of the handicap theretofore imposed may conceivably have subjected plaintiffs to such losses as are incident to more effective competition. But plaintiffs have no absolute right to require carriers to impose penalty charges [263 U.S. at 148].

Sprunt & Son v. United States, supra, is to the same effect. In that case certain shippers brought suit to set aside an order of the Commission establishing a new rate structure which eliminated, to plaintiffs' disadvantage, a rate differential previously existing. This Court reaffirmed the rule of the Hines Trustees case and held that the plaintiffs were without standing to sue, saying:

The appellants' position is legally no different from what it would have been if the carriers had filed the rates freely, pursuant to an informal sug-

gestion of the Commission or one of its members: or if the filing had been made by carriers voluntarily after complaint filed before the Commission, which had never reached a hearing, because the rate structure complained of was thus superseded. The carriers who were respondents before the Commission filed the new rates presumably because they now desire them. Nothing to the contrary is shown. So far as the carriers are concerned, it is as if the new rates had been filed wholly of their own accord and as if there had never been a controversy before the Commission. Since the appellants' economic advantage as shippers was an incident of the supposed right exercised by the carriers, the appellants cannot complain after the carriers are satisfied or prefer not to press their right, if any [281 U.S. at 256].

A close analogy is found in the decision of the Court of Appeals of the District of Columbia in the case of Wilbur v. Texas Co., 40 F. (2d) 787 (App.D.C., 1930), cert. denied, 282 U.S. 843, in which it was held that the purchaser of oil from a producer operating under a Government lease had no standing to challenge an order of the Secretary of the Interior setting a minimum price at which the lessee would be permitted to sell such oil.

The precise question was presented in Georgia Power Co. v. Tennessee Valley Authority, 14 F.Supp. 673 (N.D.Ga., 1936), where Circuit Judge Sibley, in denying an application for preliminary injunction in a case involving an attack upon the validity of the resalerate provision, took the position that that question

could not properly be raised by the complainant utility.**

In any event, these provisions of the contracts are valid. They were adopted, as the contracts recite, "In order to facilitate the disposition of surplus power. generated by Authority and not needed by it in its operations, and in order to carry out the intention of Congress to encourage the more abundant use of electricity throughout the area in which municipality [cooperative] operates" (see, e.g., comp. ex. 118, r. 2802, 2804). Cf. Isbrandtsen-Moller Co. v. United States, 300 U.S. 139. The relation of the means to the end is evident, but if proof were needed, it is amply furnished by the findings of the trial court as to the ever-increasing electric demands of the Authority's customers (fdgs. 223-226, r. 649, app. I, 91). There are definite federal interests of a traditionally accepted character involved in this situation that should not be ignored. Here the Government is selling at wholesale. To a large extent the demand by the distributor for the Government property will be influenced by the rate charged to the ultimate consumer. The Congress, as trustee of Government property, may use means to assure a widespread diffusion of the benefits to the people.

[&]quot;Whether if TVA rather than North Georgia Membership Corportion and the several towns shall be found retailing power to individual consumers, it will be subject to have its rates fixed by the Georgia Commission, and whether if TVA wholesale power to the Membership Corporation and the towns under contracts which undertake to fix the rates to consumers, such rates will be governed by the contracts or by the action of the Georgia Public Service Commission, are questions that must wait until they take concrete form with all interested parties before the court. . . Several distinctions are here urged. One is that the state of Alabama had there consented to what was done and here Georgia has not. But Georgia is not objecting, and the Georgia Power Company cannot object for it" (14 F.Supp. at 676).

It has long been established that in disposing of public property the Federal Government may contract with the purchaser as to the purposes for which the property is to be used and also as to the price at which it may be resold. In Oregon & Calif.R.R. v. United States, 238 U.S. 393, this Court had before it the problem of construing a statute providing that all land that had been granted to the railroads and that remained unsold at the time of the passage of the statute should be sold only to actual settlers, in quantities not greater than a quarter section to each purchaser and for a price not exceeding \$2.50 per acre. In a decision construing and enforcing the provisions of the statute, the Court made it clear that there could be no legitimate doubt as to the power of Congress to attach such conditions to the subsequent resale of property originally granted by it. In Ervien v. United States, 251 U.S. 41, this Court interpreted and enforced a similar grant to a State for public improvements. Cf. Ruddy v. Rossi, 248 U.S. 104; Causey v. United States, 240 U.S. 399; Wilbur v. Texas Co., supra.

In one of the leading cases, United States v. Gratiot, 26 Fed. Cas. 12 (C.C.D.III., 1839), aff'd, 14 Pet. 526, which was an action by the United States to recover rent under a lease of certain lead mines, defendants in the lower court attacked the validity of the lease because of a provision fixing the price which the defendants were permitted to charge for smelting the ore mined on the property. This Court did not pass upon this point, as it was not renewed on appeal. But

Mr. Justice McLean, who rendered the opinion in the lower court, flatly rejected the contention in the following terms:

The limitation imposed on the price of the manufactured article is a very proper regulation in the lease; as it prevents monopolies, and other consequences injurious to the public, by a combination of the lessees.

... And it [the United States] has a right to stipulate with the lessee, as one of the conditions of his lease, that he shall sell the ore he digs, or the lead he manufactures, at a fixed price. I can see no possible objection to such a regulation [26 Fed. Cas. at 13-14].

3. THE POWERS RESERVED TO THE STATES UNDER THE TENTH AMENDMENT ARE NOT INVADED BY THE STATUTE OR THE ACTIVITIES AUTHORIZED THEREUNDER.

The appellants argue that the statute and the activities of the Authority pursuant thereto will result in the displacement of the State-regulated utilities and the creation of a federal utility free from State control and must therefore be held an unlawful invasion of the rights reserved to the States under the tenth amendment. Appellants' argument proceeds on an erroneous view of the limitations imposed by the tenth amendment on the power granted to the Congress, a point which was fully discussed in the Government's brief in *United States* v. *Bekins*, 304 U.S. 27. The argument is untenable even though the tenth amendment be construed to limit the powers otherwise granted to the Congress by the Constitution.

It should be observed at the outset that the consequence of the acceptance of appellants' argument is to confer upon the Commonwealth and Southern companies a constitutional monopoly of the Government's power, or, indeed, to commit all the power to waste. The denial of authority in the Congress to construct the necessary transmission facilities to serve municipalities, cooperatives, and industries would limit the Authority's market to the dam sites where the Commonwealth and Southern companies are, in all practical effect, the only available purchasers. Appellants' argument would require the Government to waste the power entirely. If the Authority can sell at all, it may, as appellants argue, fix the terms. If this amounts to an invasion of the power reserved to the States, as appellants urge, the Authority may not dispose of any power. For these reasons alone the contention should be rejected. See Ashwander v. Tennessee Valley Authority, supra at 339.

There is another and conclusive answer. The Authority's method of disposition does not impair the ex-

ercise of the States' police power.

(a) The sale of power to municipalities, cooperatives, and industries is not invalid under the tenth amendment: Appellants ignore the obvious fact that the Authority is dealing with municipalities and cooperatives who are subject at all times to the complete control of the States. While the States in which the Authority operates have exempted municipalities and cooperatives from the junisdiction of their respective regulatory commissions, if the States should elect to

remove this exemption the Authority's sale of power to municipalities and cooperatives at wholesale would in no way prevent State regulation of the distribution to the ultimate consumer. Memphis Power & Light Co. v. Memphis, supra; Oppenheim v. Florence, supra. Under the decisions of this Court, such an arrangement by which the State authorizes its agencies at their election to purchase property from the Government can give rise to no questions under the tenth amendment. Cf. Steward Mach. Co. v. Davis, 301 U.S. 548; United States v. Bekins, supra.

What has been said above indicates the answer to the claim that the Authority may invade appellants' markets without State consent and, having destroyed the appellants' business, can withdraw without State permission (see br. 160-161). The States are under no obligation to contract with the Authority. municipalities, which are mere agents of the States, may be forbidden to do so, and the same is true of the quasi-public electric membership corporations. Hopkins Fed. Sav. & Loan Ass'n v. Cleary, 296 U.S. 315. During the period of the contract the Authority is bound according to the terms of its agreement. Cf. Lynch v. United States, 292 U.S. 571. The conjecture that the Authority thereafter may abandon the costly facilities it has constructed for wholesale service and withdraw its service without State permission is without substance.

The appellants contend that the Authority's method of distribution should be held invalid because, if lawful, the Authority may fix its own terms. The rander case, the Authority may "sell and fix the terms." See Ashwander v. Tennessee Valley Authority, supra at 338. If these terms are unsatisfactory to the States, they may refuse to contract and, it would seem, forbid their public agencies and quasi-public corporations to do so. Cf. Hopkins Fed. Sav. & Loan 188'n v. Cleary, supra.

Any effect on the customary regulation of appellants which may result from the competition of State agencies as authorized by States themselves is The States concerned may authorize immaterial. municipalities to construct and operate electric plants in competition with appellants, though the result is harmful to appellants' business. Alabama Power Co. v. Ickes, 302 U.S. 464. To the extent that this competition is related to the wholesale service of the Authority, the case presented is one of the federal exercise of a granted power to dispose of public property by sales to local public agencies, who, themselves, engage in an enterprise which the States have lawfully authorized. Such cooperation is permitted by the Constitution and not forbidden by the tenth amendment. See Duke Power Co. v. Greenwood County, 91 F. (2d) 665, 673 (C.C.A. 4th, 1937); cf. Steward Mach. Co. v. Davis, supra; United States v. Bekins, supra.

The conclusion is the same with respect to the Authority's contracts for the sale of firm and secondary power to certain electrochemical and electrometallurgical industries. The sale of the Government's power in this market, as we have pointed out above, "is of no

detriment to the state (Georgia Power Co. v. Tennessee Valley Authority, 14 F.Supp. at 676). It cannot seriously be suggested that the Authority's industrial customers are in need of protection against exorbitant rates, and the contention that the sale of the Authority's power to industries may conflict with State policy with respect to the geographic distribution of industry is without substance. The policy of rate uniformity, repeatedly emphasized in complainants' testimony, is, in fact, applied only to the extent of requiring nondiscrimination by any individual utility. The trial court found that as between the complainant companies operating within a State there is no requirement of uniformity of rates (fdg. 27, r. 599, app. I, 19). No such policy could be enforced on a State-wide basis applicable to all utilities, in view of the constitutional requirement that each separate utility must be allowed an adequate return necessarily varying with the particular investment of the individual company, and obviously no State could prohibit its neighbors from adopting a policy in conflict with its own.

It should be finally observed that competition is not regulation. Appellants' contention that the sale of power by the Authority results in the unauthorized regulation of their intrastate business is based in part upon the theory that in order to meet such competition they will be forced to lower their rates. This effect is characterized as "regulation." This Court has repeatedly held that an exercise of a delegated power is not rendered invalid by reason of its incidental effects.

Cf. Duke Power Co. v. Greenwood County, 91 F. (2d) 665; Sonzinsky v. United States, 300 U.S. 506, 513-514; United States v. Carolene Products Co., 304 U.S. 144. And it follows that any effect upon business which may indirectly result from competition of municipalities in the distribution of power purchased from the Authority (as well as from sales to industrials) may not be deemed in any legal sense an impairment of regulation.

(b) The size of the Authority's projects presents no question under the tenth amendment: The appellants' principal contention is that the physical size of the Authority's projects for the disposition of power must necessarily result in the impairment of the rights reserved to the States. The facts in this regard, as we have previously observed, are exaggerated by the The conclusion is the same, however, appellants. though the facts were as stated by the appellants. As we have shown above, the Authority's wholesale service to municipalities and cooperatives and its sales to industry do not interfere in any way with the exercise of the State's police power because of the limitation in the nature of the service, and it cannot be material, therefore, what amount of power may be sold by the Government in this manner.

This conclusion is clear in principle, but it should be further observed that appellants' position is in conflict with the relevant decisions of this Court. Appellants rely on a phrase from the opinion of this Court in the Ashwander case describing the challenged contract of January 4 as a "limited transaction." But appellants quote this Court's language out of context and

omit language of decisive significance. What this Court said was that

The transmission lines which the Authority undertakes to purchase from the Power Company lead from the Wilson Dam to a large area within about fifty miles of the dam. These lines provide the means of distributing the electric energy, generated at the dam, to a large population. furnish a method of reaching a market. The alternative method is to sell the surplus energy at the dam, and the market there appears to be Imited to one purchaser, the Alabama Power Company, and its affiliated interests. We know of no constitutional ground upon which the Federal Government can be denied the right to seek a wider market. We suppose that in the arly days of mining in the West, if the Government had undertaken to operate a silver mine on its domain, it could have acquired the mules or horses and equipment to carry its silver to market. And the transmission lines for electric energy are but a facility for conveying to market that particular sort of property, and the acquisition of these lines raises no different constitutional question, unless in some way there is an invasion of the rights reserved to the State or to the people. We find no basis for concluding that the limited undertaking with the Alabama Power Company amounts to such an invasion. Certainly, the Alabama Power Company has no constitutional right to insist that it shall be the sole purchaser of the energy generated at the Wilson Dam; that the energy shall be sold to it or go to waste [297 U.S. at 339].

We construe the words "limited transaction" as referring to the nature of the service contemplated, not to its territorial scope. Earlier in its opinion this Court rejected the contention that the amount of power which the Government may sell is limited by any consideration other than the amount lawfully available. This Court said:

The United States owns the coal, or the silver, or the lead, or the oil, it obtains from its lands, and it lies in the discretion of the Congress, acting in the public interest, to determine of how much of the property it shall dispose.

We think that the same principle is applicable to electric energy [id. at 336].

The lack of merit in appellants' contention becomes apparent when measured by its application to other projects which have heretofore been deemed within the constitutional powers of the Congress. The amount of power generated at the Boulder Canyon project alone, for example, is almost equal to the amount to be produced at all of the dams constructed, or authorized for construction or investigation, by the Authority. (See Wilbur and Ely, The Hoover Dam Power and Water Contracts (U.S.Dept. Interior, 1933) p. 16; cf. def. ex. 140, r. 4187). The method of disposition in the case of Boulder Dam does not differ materially from that involved in the case at bar. The Boulder Canyon Project Act (45 Stat. 1057) gave the Secretary of the Interior a wide choice of means to dispose of power (secs. 4, 5, 6). He was authorized

to make contracts for the sale of electrical energy or the use of water for power purposes. He was authorized to install generating equipment and operate it. Or he could, in his discretion, enter into contracts of lease of a unit of any Government-built plant, with the right to generate electrical energy or, alternatively, enter into contracts of lease for the use of water at the dam for the generation of electrical energy. The Boulder Canyon Project Act provided for the means of transmission as well as generation (sec. 5 (d)). It provided that any agency which should receive a contract for electrical energy in a large bulk (100,000 firm horsepower) could be required by the Secretary to permit purchasers of smaller amounts of power to use their transmission lines upon the payment of a reasonable share of the cost of construction, operation, and maintenance.

The significance of these provisions in the Boulder Canyon Project Act becomes obvious when the legislative history of that act is examined. The construction of a power plant by the United States at Boulder Dam had been strongly urged by the Secretary of the Interior, who disapproved a previous bill for a project there on the ground that it included no provision for such a plant. (See S.Rept. 592, 70th Cong., 1st sess., p. 31.) In the utilization of the electric power to be generated by this plant, the objectives of Congress were clearly stated. The report of the Senate committee on the project explained that the allocation of power which was contemplated would avoid danger of monopolization:

The plan of the Boulder Canyon project, as expressed in the bill, contemplates allocation of the power or power rights at Boulder Canyon amongst various agencies, including States, political subdivisions, municipalities, domestic water-supply districts, and private companies.

With such a distribution of power or power rights at the dam, all danger of monopolization will be avoided, and there will be created a sound competitive condition between these various agencies which will insure the consuming public protection in the form of reasonable rates and good service [id. at 26-27].

The report of the House committee enunciated the same objective:

There were many indications in the testimony adduced before the committee that there would be considerable competition to secure this very desirable power. The committee has so framed the legislation to guard as fully as might be against this asset, created by Federal initiative, being monopolized by any one agency. The bill contemplates that the power will be fairly and equitably distributed amongst the various agencies applying therefor, thus insuring the widest and fairest possible distribution of the benefits [H. Rept. 918, 70th Cong., 1st sess., p. 22].

As actually consummated prior to the appropriation for the project, the Secretary of the Interior entered into contracts with the city of Los Angeles (hav-

ing a population of more than twice the combined population of the three large cities under contract with the Authority) and with the Southern California Edison Company which established them as generating agencies to satisfy the requirements of contracts made and to be made by the Secretary with other purchasers. At the outset, the Secretary contracted with the Metropolitan Water District as such a purchaser. Later, in 1933, it was stated that five additional purchasers had entered into contracts with the Secretary which the generating agencies were obligated to satisfy. (See Wilbur and Ely, supra at 45.) The generating costs attributable to the energy delivered to these allottees are to be repaid to the generating agencies by the United States in the form of deductions upon their obligations to the Government, and the United States undertakes to collect these costs from the allottees (id. at 50).

The Secretary of the Interior, in reporting on the original contracts to the Senate Committee on Appropriations in 1930, explained that "a wide regional benefit from this power was desired and obtained" (id. at 601). He stated that ninety-one percent of the firm energy was allocated to public agencies to be generated at the dam by the city of Los Angeles; and that the remaining nine percent was allocated to "four public utilities who alone can serve the great agricultural back-country" (ibid.).

The statute provided and the contracts required that the generating agencies should permit the use of their transmission lines by allottees of small amounts of power, on suitable conditions. See Wilbur and Ely, supra at 146-147.

The limitation suggested by appellants would defeat the declared policy of Congress to distribute and sell the surplus power "equitably among the States, counties, and municipalities within transmission distance" (sec. 11). We submit that the physical size of the projects which the Congress may lawfully undertake to dispose of public property must be measured by the need, and the question of the need, this Court has held, is one primarily for the Congress to determine. Cf. United States v. Gratiot, supra at 533, 538; Light v. United States, supra at 537. It would be difficult to imagine any undertaking of broader territorial scope than the federal reclamation projects authorized by the Reclamation Act of 1902. Pursuant to the authority of this act, federal reclamation projects have been constructed in many parts of all the States of the arid West in which the Government owned substantial tracts of land.

The Authority's method of distribution substantially serves a legitimate federal objective and impairs no substantial interest of the States. The Constitution permits, and the tenth amendment does not forbid, the Congress to authorize the execution of power contracts and the acquisition of the necessary electric facilities in such number and extent as, in the reasonable exercise of its discretion as trustee "for all of the people" (United States v. Trinidad Coal Co., supra at 160), the Congress may deem necessary to distribute all the Government's power in the public-interest. The territorial scope of

the project cannot be limited on any rational legal principle. As well might it be said that the Government's authority to dispose of power may extend to the entire State of Delaware, "limited" in size, but not throughout the vast expanse of Texas. It would seem clear that the Federal Constitution—the grants of power no less than the limitations—has application in all the States and all the counties of the United States, in the entire States of Tennessee, Mississippi, and Alabama as well as in the six northern counties of Alabama (and the ten northeastern counties of Mississippi) to which the contract in the Ashwander case related.

(c) The resale-rate provisions of the contracts present no question under the tenth amendment: It is suggested by appellants that these provisions deprive the States of their power to regulate the rates at which electricity shall be sold in intrastate transactions. There is in fact in the contractual arrangements of the Authority no interference with State jurisdiction. The fact that the States, pursuant to what they deem a wise public policy, have seen fit to exempt these agencies from the rate and commission regulation to which private utilities such as appellants are subject does not mean that the power has been abandoned or bartered away.

Enabling legislation expressly authorizing municipalities to purchase electricity from the Authority and to contract with respect to the terms and conditions upon which such electricity is to be resold has been enacted in the States in which the Authority is under contract to sell power in the claimed territory of any appellant.39 This legislation has been sustained by the courts against attacks challenging its validity under State law upon every conceivable ground, including the charge that such contracts deprived the States of their power of regulation. Oppenheim v. Florence, 229 Ala. 50 (1934); Memphis Power & Light Co. v. Memphis, 172 Tenn. 346 (1937); Tennessee Elec. Power Co. v. Fayetteville, 114 S.W. (2d) 811 (Tenn., 1938); Kentucky-Tennessee L. & P.Co. v. Clarksville, Tenn. Sup. Ct., 1937 (app. II, 132). Similarly, the Supreme Court of Alabama has upheld the validity of the Alabama statute authorizing the organization of rural cooperative associations, empowering such associations to contract with the Tennessee Valley Authority for the purchase and resale of electricity, and exempting them from the jurisdiction of the State regulatory commission. Alabama Power Co. v. Cullman County Elec. Membership Corp., 234 Ala. 396 (1937). In the above-cited cases the State courts have sustained the validity of the identical contract provisions that are here under attack and have expressly declared that such contracts do not abrogate or invade the regulatory power of the States.

In Oppenheim v. Florence, supra, the Supreme Court of Alabama was dealing with a test suit brought for the purpose of determining the validity under State law of the loan-and-grant agreement between the city of Florence and the Public Works Administration and the power contract between the city and the Au-

See app. II, 113; see also app. appellants' br., 47-66.

thority. The contract there involved contained covenants similar to those included in the contracts here under attack. After sustaining the validity of the Carmichael Act (Alabama Acts (ex. sess. (1933) No. 107)) authorizing Alabama municipalities to construct and operate electric distribution systems and to contract with the Authority for a supply of power, the court disposed of the contention that the resale-rate provisions of that contract surrendered to the Authority sovereign powers of the State. Referring to the Carmichael Act under which the contract was made, the court said:

Instead of granting an uncontrolled and irrevocable right to the cities, it unmistakably reserved its supervision inherent in its police power to pass upon the reasonable aspect of such rates. Within those limits cities have had thereby conferred on them a reasonable latitude to exercise a discretion, but with the right of supervision reserved to the state.

The effect of the Carmichael Act is that the city cannot bind itself as to rates and regulations for the distribution of electricity in such manner that the court cannot review them to determine if they are reasonable and legal. As we interpret this entire set-up, it is not here so proposed [229 Ala. at 57].

In the case of Memphis Power & Light Co. v. Memphis, supra, the bill sought to enjoin the city of Memphis from proceeding with a contract to purchase power at wholesale from the Tennessee Valley Au-

thority. This contract contained all of the covenants and conditions which appellants insist constitute an unlawful regulation of intrastate rates. One of the principal questions argued before the court was the validity of the resale-rate provisions. In the words of the court:

The primary insistence of complainant is that the contract of the city with TVA confers governmental powers upon the latter by delegating to it authority to fix resale rates . . . [172 Tenn. at 353].

In upholding the validity of the contract with particular reference to these covenants, the court first determined that the power of a municipality to contract with reference to the rates to be charged for electric service within its borders was in the nature of a private business power and not governmental. It then proceeded to hold:

In the instant cause such power was delegated to the city, and it has exercised the authority so conferred upon it and has not, our opinion, delegated the making of resall test to TVA....

The TVA is a public instrumentality and holds the electric energy generated at its dams in trust for the people of the whole country....

One of the objects of TVA is to supply the inhabitants within its territory with cheap electric current. It does not operate for profit. The contract which it has entered into with the city is predicated upon reasonable rates, and there can be little doubt but that in order to effectuate the purpose to protect the public against unjust

charges, it reserved the right to approve any increase in rates. There is no provision in the contract authorizing TVA either to increase or reduce the rates agreed upon. The reserved right to approve any increase in charges is a merely supervisory privilege that must be exercised reasonably and not arbitrarily, and, being a servant of the general public, it is presumed that in exercising this right it will conform to the spirit of the contract. . . . But the regulation of rates, however accomplished, is subject to the continuing police power of the state [id. at 359-361].

In this opinion the Supreme Court of Tennessee squarely met and answered every objection to the contracts that is here urged. The contracts involve no delegation of the sovereign power of the State: (1) because the power to contract with reference to rates is not governmental; (2) because there has been no delegation but, on the contrary, an exercise of the power by the contracting municipality; and (3) because the operations of the municipality under the contract remain subject to the reserved police power of the State. The decision in this aspect was in accord with established Tennessee precedents. Memphis v. Enloe, 141 Tenn. 618 (1919); Lewis v. Nashville Gas & Heating Co., 162 Tenn. 268 (1931). The court further recognized the important fact that in disposing of Government property created at the dams, Congress has the undoubted right to prescribe conditions that are designed to guarantee a widespread and equitable distribution of this property for the general welfare.

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There would be no basis for objection, we submit, if the municipalities and cooperatives were authorized to make resale-rate contracts binding on the States. The States may authorize municipalities to enter into binding contracts with private utilities, fixing the utilities' rates for the duration of the contract. Detroit v. Detroit Citizens St. Ry. Co., 184 U.S. 368; Detroit United Ry. v. Michigan, 242 U.S. 238; St. Cloud Public Service Co. v. St. Cloud, 265 U.S. 352, 355. In any event, there cannot be said to be any impairment of State sovereignty where, as here, the States reserve a continuing power to revoke their consent.

The decision in Steward Mach. Co. v. Davis, 301 U.S. 548, would seem conclusive on this point. In that case, this Court sustained the constitutional power of Congress to make the enactment of State legislation a condition precedent to receiving the benefits of the Social Security Act. In rejecting the contention that this condition was in violation of the tenth amendment, this Court said:

We are to keep in mind steadily that the conditions to be approved by the Board as the basis for a credit are not provisions of a contract, but terms of a statute, which may be altered or repealed . . . The state does not bind itself to keep the law in force.

The inference of abdication thus dissolves in thinnest air when the deposit is conceived of as dependent upon a statutory consent, and not upon a contract effective to create a duty. By this we do

not intimate that the conclusion would be different if a contract were discovered. Even sovereigns may contract without derogating from their sovereignty. Perry v. United States, 294 U.S. 330. 353; 1 Oppenheim, International Law, 4th ed. §§ 493, 494; Hall, International Law, 8th ed., § 107; 2 Hyde, International Law, § 489. The states are at liberty, upon obtaining the consent of Congress, to make agreements with one another. Constitution, Art. I, § 10, par. 3. Poole v. Fleeger, 11 Pet. 185, 209; Rhode Island v. Massachusetts, 12 Pet. 657, 725. We find no room for doubt that they may do the like with Congress if the essence of their statehood is maintained without impairment [301 U.S. at 594-597].

This principle was affirmed and extended by this Court in sustaining the constitutionality of the amended Municipal Bankruptcy Act, even though the consent of the State to any particular composition, once given, could not be withdrawn. In *United States* v. *Bekins*, 304 U.S. 27, this Court said:

It is of the essence of sovereignty to be able to make contracts and give consents bearing upon the exertion of governmental power. . . .

Nor did the formation of an indestructible Union of indestructible States make impossible cooperation between the Nation and the States through the exercise of the power of each to the advantage of the people who are citizens of both [304 U.S. at 51-53].

There is no merit in appellants' contention that the resale-rate provisions must be held invalid because, if lawful, the Congress may reach the same end without State consent. It is settled that the States may withhold from municipalities authority to execute rate contracts or may authorize such contracts subject to a continuing power in the States to set the contract aside. Puget Sound Traction L. & P.Co. v. Reynolds, 244 U.S. 574; cf. Home Telephone Co. v. Los Angeles, 211 U.S. 265. The States enjoy the same power with respect to the quasi-public electric membership corporations created under State laws. Hopkins Fed. Sav. & Loan Ass'n v. Cleary, 296 U.S. 315.

The argument is advanced that the sale of the Authority's power for distribution in competition with appellants, when coupled with agreements as to resale rates, has the necessary effect of regulating appellants' rates, or at least impairing the powers of the States to regulate them. It cannot seriously be urged that the Authority's method of disposition has been "contrived" for this purpose and that it serves no other or no legitimate federal purpose. These provisions are contained in contracts with many municipalities and cooperatives serving consumers which appellants either do not serve or have no franchise to serve (fdgs. 220, 221, r. 648, app. I, 90). It is not even claimed that the Authority has made or rejected any contracts with municipalities depending upon appellants' rates or any offer of appellants to reduce their rates (cf. fdg. 221, r. 648, app. I, 90).

What has been said with respect to the claimed regulation of the municipalities through the resalerate provisions sufficiently disposes of the contention as to the claimed regulation of the appellants. A similar contention was rejected in the Duke Power case, where the court observed that the exercise of a claimed power cannot be defeated because of its incidental effect on complainants' rates. Duke Power Co. v. Greenwood County, 91 F. (2d) 665, 673, 676; cf. United States v. Carolene Products Co., 304 U.S. 144, 147; Sonzinsky v. United States, 300 U.S. 506, 513-514.

4. THERE IS NO MERIT IN THE CHARGE THAT THE AUTHORITYS METHOD OF DISPOSITION CONSTITUTES "UNFAIR COMPETITION" IN EXCESS OF STATUTORY POWERS OR IN VIOLATION OF THE FIFTH AMENDMENT.

Appellants argue that the rates of sale by the Authority and its wholesale customers are at such low levels that they cannot be met in competition by the appellants, and hence the enforcement of the policy of the statute necessarily results in violation of the fifth amendment. A sufficient answer to this contention is furnished by the decisions of this Court in Standard Scale Co. v. Farrell, 249 U.S. 571; Pennsylvania R.R.Co. v. United States R.R. Labor Board, 261 U.S. 72; United States v. Los Angeles R.R., 273 U.S. 299. Since the appellants are not forced by any compulsion of law or regulation to meet this scale of rates, a consideration of whether such rates would be confiscatory if imposed upon the appellants is clearly irrelevant. Completely ignoring the principle of the above authorities that the release of information and the comparison of standards does not constitute regulation by law, appellants would have this Court treat this case exactly as if the rate schedules at which Government power is sold had been imposed upon them by the order of a regulatory commission.

In addition to the fact that there is no regulation and therefore no confiscation, this argument ignores the settled doctrine that where a public body is otherwise authorized to sell water, gas, or electricity it can make such sales at any level of rates that it desires. even though such rates may be below the cost of production and may be at such a level that a private utility cannot compete. That this is true as to the State and its agencies, acting pursuant to statutory authority. is now too clear for argument. The due process clause of the fourteenth amendment does not prohibit the State or its properly authorized agencies from engaging in competition with a private utility operating in the same area, and where such a competitive situation exists the State or its agencies may perform utility services at rates below those of the private utility and even at rates which the utility cannot meet without the destruction of its business. Walla Walla v. Walla Walla Water Co., 172 U.S. 1; Skaneateles Water Co. v. Skaneateles, 184 U.S. 354; Joplin v. Southwest Mo. Light Co., 191 U.S. 150; Helena Water Works Co. v. Helena, 195 U.S. 383; Knoxville Water Co. v. Knoxville, 200 U.S. 22; Madera Water Works v. Madera, 228 U.S. 454; Springfield Gas Co. v. Springfield, 257 U.S. 66; Vicksburg v. Henson, 231 U.S. 259; Puget Sound Co. v. Seattle, 291 U.S. 619.

In these cases this Court has repeatedly held that even where a utility's business is destroyed as a collateral effect of otherwise authorized competition by a public body, there is no deprivation of property within the meaning of the due process clause. It must be equally true that any damage from sales of power by the Government is the indirect result of an exercise of the paramount power of Congress and is not a "taking" within the terms of the fifth amendment.

Both at the trial and in their brief (pp. 233-235) appellants have emphasized what they term "unfair competition." It is difficult to catalogue the charges grouped under this general term. It is still more difficult to determine whether appellants mean to insist that the charges if established would invalidate the statute and the acts done pursuant to it or merely that proof of the charges would entitle them to some form of limited relief against the specific acts claimed to constitute "unfair competition."

Regardless of the legal theory upon which these illdefined charges of "conspiracy with the PWA," "duress," "coercion," "malice," and "solicitation" of appellants' customers are advanced, none of them are supported by the record.

As the trial court pointed out in its opinion, the facts in this record "do not evidence acts deemed coercion under settled legal principles," and "No malice in law is shown on this record" (app. I, 124). The allegations in the bill were that defendants had conspired to coerce complainants to sell their plants at distress figures and had coerced municipalities and coopera-

tives to set up their own distribution systems for the Authority's power.40 The proof offered to support the charge of coercion of complainants to sell consisted of evidence that complainants were unable to compete with municipalities and cooperatives receiving grants and loans from the Public Works Administration and selling power at Tennessee Valley Authority rates. As the trial court pointed out, the municipalities and cooperatives being lawfully engaged in the business of selling electricity, the complainants have no legal right to be free from such competition even though it curtail or destroy their business, and complainants have no standing to challenge the validity of loans and grants to them. Alabama Power Co. v. Ickes, supra. Such competition, therefore, does not amount to legal coercion or duress.

The court found that no coercion was exercised by the Authority upon the municipalities and cooperatives. The evidence amply supports this finding. The facts are succinctly summarized in the court's opinion:

Certain officials and employees of the TVA gave information, counsel and encouragement to municipalities and co-operatives at the request of such municipalities and co-operatives with respect to the general feasibility of setting up distribution systems for TVA power. The decision on such matters was made by the municipality or co-opera-

So far as can be ascertained, the alleged "conspiracy" was to the effect that the Public Works Administrator would undertake to make loans and grants for the purpose of assisting the Authority in marketing its power. The only question which could be thus raised was the validity of the action of the Public Works Administrator. This is the very question adjudicated in Alabama Power Co. v. Ickes, supra. The Administrator was not a party in the case at bar. See infra pp. 216-220.

tive concerned. Under the statutes of Alabama. Tennessee and Mississippi, hereinafter cited, both municipalities and rural co-operatives are authorized to construct generating plants and distribution systems for the purpose of creating and distributing electric energy. Georgia has a similar statute concerning co-operatives. These cities and co-operatives were free to obtain information and counsel from any source. In each case the decision of the municipality involved was made either by the citizens at an election, or by its duly elected officers. The decision of the co-operatives involved was made by its lawful representatives. Presentation by the Authority of facts as to TVA rates and contracts for power given to citizens or officers of a city or rural co-operative at their request do not constitute intimidation or coercion [app. I. 127]:

Cf. Steward Mach. Co. v. Davis, supra; United States v. Bekins, supra.

The attempt to show malice on the part of the Authority similarly failed. The record amply demonstrates that the marketing activities described above provide a market for widespread use of the surplus power developed at its navigation and flood-control dams, and that the means used to dispose of this power are reasonably appropriate to that end. The Authority has not utilized the preference provisions to favor those municipalities previously served by the appellant companies to promote public ownership in such municipalities. No effort has been made to limit the negotiation of contracts to those municipalities

previously receiving service from the appellant companies. On the contrary, most of the contracts executed by the Authority provide for service to municipalities which owned and operated their own municipal distribution systems prior to the passage of the Tennessee Valley Authority Act (fdgs. 219, 220, r. 648, app. I, 89, 90).

The facts brought out in the record abundantly support the following fludings of the court:

- 186. The transmission lines substantially as constructed by the Authority are essential for service to the customers of the Authority now being served or under contract [r. 641, app. I, 80].
- 217. The officials of the Authority have taken the position in correspondence with municipal officials that the question of whether a municipality shall own and operate its own distribution system is one for the sole determination of the municipality [r. 648, app, I, 89].
- 227. The Authority has not induced the breach of any power contract between any complainant and any of its customers [r. 649, app. I, 92].
- 228. In marketing the power generated at its dams the Authority has not engaged in any solicitation of customers, coercion, duress, fraud, or misrepresentation in procuring contracts with municipalities, cooperatives, or other purchasers of power [r. 649-650, app. I, 92].

In view of this record, the court's conclusions that "no malice in law" was shown necessarily followed. It cannot seriously be suggested that the sole purpose of

the Authority in marketing the Government's power has been to injure the complainants. Isbrandtsen-Moller Co. v. United States, 300 U.S. 139, 145; Beardsley v. Kilmer, 236 N.Y. 80 (1923); Passaic Print Works v. Ely & Walker Dry-Goods Co., 105 Fed. 163 (C.C.A. 8th, 1900); cf. American Bank & Trust Co. v. Federal Reserve Bank, 256 U.S. 350, 262 U.S. 643.

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APPELLANTS HAVE NO STANDING TO MAINTAIN THIS SUIT.

The gravamen of appellants' case on the issue of their legal standing is, and must be, that they are threatened with substantial and irreparable injury from the competition of the Authority. It is in competition by the Authority, if anywhere, that there is to be found "action of a definite and concrete character constituting an actual or threatened interference with the rights of" the appellants (Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 324)! Our position on this issue is threefold: (1) Appellants' "franchises," if any, afford no basis for the maintenance of this suit; (2) most of the appellants lack standing to maintain this suit either because they are estopped or because the Authority is not engaged in or threatening any activities in their claimed territories; and (3) the only competition which will cause damage to any of the appellants is the competition of the municipalities and cooperatives, and such competition does not involve legal injury.

1. APPELLANTS' "FRANCHISES," IF ANY, AFFORD NO BASIS FOR THE MAINTENANCE OF THIS SUIT.

Assuming that the Authority itself is to be regarded as in competition with appellants,⁴¹ appellants have no standing by reason of their franchises or otherwise to challenge the validity of the grant of power to the Authority.

We consider first the status of appellants apart from franchises which they may possess. None of appellants are entitled to be free of competition. As they are not entitled to immunity from competition, they have no standing to question the authority of a rival to compete. This is made clear in Railroad Co. v. Ellerman, 105 U.S. 166. There the Court treated the question as one involving the standing of a wharfinger to enjoin competition by a railroad company having no charter power to engage in such a business. In rejecting the claim that damage from unauthorized competition affords a basis for injunctive relief, the Court said:

But if the competition in itself, however injurious, is not a wrong of which he could complain against a natural person, being the riparian proprietor, how does it become so merely because the author of it is a corporation acting ultra vires? The damage is attributable to the competition, and to that

It will be shown infra (pp. 182-192) that the only damage, actual or threatened, to any of appellants is properly attributable to the competition of the municipalities and rural cooperatives, and that such competition is damnum absque injuria.

alone. But the competition is not illegal. It is not unlawful for any one to compete with the company, although the latter may not be authorized to engage in the same business. The legal interest which qualifies a complainant other than the State itself to sue in such a case is a pecuniary interest in preventing the defendant from doing an act where the injury alleged flows from its quality and character as a breach of some legal or equitable duty. A stockholder of the company has such an interest in restraining it within the limits of the enterprise for which it was formed, because that is to enforce his contract of membership. The State has a legal interest in preventing the usurpation and perversion of its franchises, because it is a trustee of its powers for uses strictly public. In these questions the appellee has no interest, and he cannot raise them in order, under that cover, to create and protect a monopoly which the law does not give him [pp. 173-174].

The same principles are applicable where the defendant is a public agency or officer and where the alleged lack of authority lies in an excess of constitutional rather than charter powers. Although the contrary position was strenuously advanced in the Alabama Power case, the argument was rejected, and necessarily so. To have held otherwise would have been to establish a novel doctrine of public law. For "Suitors may not resort to a court of equity to restrain a threatened act merely because it is illegal or transcends constitutional powers" (United Gas Co. v. Railroad Comm, 278 U.S. 300, 310). Allegations of unconstitutionality do not dispense with the requirement that one who seeks

an injunction must show some "'direct injury suffered or threatened, presenting a justiciable issue,' "the concept of "direct injury" meaning "a wrong which directly results in the violation of a legal right" (Alabama Power Co. v. Ickes, 302 U.S. 464, 479). Only where an injury of this character, which would otherwise be justiciable, is presented does occasion arise to consider the justification of the defendants' conduct founded on an act of the Legislature. The power of the courts to declare an act unconstitutional, it was said in Massachusetts v. Mellon, 262 U.S. 447,

power to disregard an unconstitutional enactment, which otherwise would stand in the way of the enforcement of a legal right. . . . If a case for preventive relief be presented the court enjoins, in effect, not the execution of the statute, but the acts of the official, the statute notwithstanding [p. 488].

The whole history of suits against Government officers, with the requirement in such suits that an actionable injury be shown apart from the alleged unconstitutionality, demonstrates the firmness of this principle. The right which will support a "case for preventive relief" may be founded on contract, 42 or on an interest entitled to protection from tortious invasion, 43 or on a

E.g., Walla Walla v. Walla Walla Water Co., 172 U.S. 1.

E.g., the seizure of property, In re Ayers, 123 U.S. 443; Lipke v. Lederer, 259 U.S. 557; Hamilton v. Kentucky Distilleries Co., 251 U.S. 146; the placing of a cloud on title, Scully v. Bird, 209 U.S. 481, 488-490; Lane v. Watts, 234 U.S. 525, 540; vexatious and oppressive litigation, Exparte Young, 209 U.S. 123, 160; threats of coercion, Pierce v. Society of Sisters, 268 U.S. 510; Truax v. Raich, 239 U.S. 33.

statute conferring a privilege.⁴⁴ Only if such a case is presented does it become necessary or appropriate to inquire into the validity of the statute set up by the defendant in justification. Putting aside the question of franchise rights, which will be dealt with separately, it seems plain enough that no case for preventive relief is made out merely by coupling a showing of competition with an allegation that the competition is beyond the constitutional power of the Authority.

Appellants contend, however, relying upon Frost v. Corporation Comm., 278 U.S. 515, that as holders of franchises they are entitled to challenge the validity of the Authority's competition. In the Frost case the plaintiff held a certificate of public convenience and necessity to operate a cotton gin, the certificate having been issued by a State commission under a statute which provided that the commission "may authorize a new ginning plant only after a showing is made that such plant is a needed utility" (p. 519). A majority of the Court in the Frost case were of opinion that as the holder of such & certificate of convenience and necessity the plaintiff was entitled to enjoin the issuance of a certificate to a competing cooperative on the ground that the amendment to this statute, granting to cooperatives the privilege of engaging in the same business without similar limitations, was an unconstitutional discrimination under the fourteenth amendment. In short, as explained in subsequent decisions, that case decided that a franchise of the character there con-

E.g., the use of the mails, American School of Magnetic Healing v. McAnnulty, 187 U.S. 94, 110; Baldwin Co. v. Robertson, 265 U.S. 168.

ferred under State law entitled the holder to attack the competition of another seeking to operate without a similar franchise or under a void franchise. In Corporation Comm. v. Lowe, 281 U.S. 431, the principle was thus stated:

In Frost v. Corporation Commission of Oklahoma, 278 U. S. 515, the Court concluded that one who had complied with the statutes of Oklahoma and had obtained a permit to operate a cotton gin, held a franchise which constituted a property right, and that while this right did not preclude the State from making similar valid grants to others, it was an exclusive right as against attempts to operate a competing gin without a permit or under a void permit [p. 435].

See also Alabama Power Co. v. Ickes, supra at 484-485.

The Frost case did not hold that a franchise holder has the right to question generally the charter or constitutional powers of a competitor, as appellants seek to do in this case. Appellants do not base their attack upon the lack of similar franchises by the Authority. This suit is neither for the protection of any particular franchise nor for the annulment of a void franchise. Appellants frankly state their position to be that the "holder of a non-exclusive franchise has a right to invoke a judicial determination of whether any actual or threatened competition with him is legal" (br. 196-197). This contention that a franchise holder has the right to contest the legality of competition generally and on any grounds goes far beyond the holding of the Frost case and is in direct conflict with this Court's decision in the Ellerman case, supra.

The appellants here have no franchises, so far as appears, which confer protection against unauthorized competition. Two classes of so-called franchises are relied upon by appellants (br. 61-63, 196). One type is granted by the municipalities and counties, the other by the States. Each class will be considered in turn, with respect to its nature and its relevance to the operations of the Authority.

Municipal and county easements or "franchises": The municipal and county franchises, so called by appellants, have been carefully described in finding 28 (r. 599, app. I, 19) based on a stipulation of the parties (r. 2453). It appears that appellants have been issued "franchises, licenses, or easements by most but not all of the municipalities and by most but not all of the counties in which they respectively operate electric facilities" (fdg. 28, r. 599, app. I, 19). Concerning these franchises, licenses, or easements the court found, on the basis of the stipulation:

Said franchises, licenses, or easements vary in original term and in unexpired term from a few months to more than 50 years, and many are unlimited in term. Most of the said franchises, licenses, or easements purport to be nonexclusive. Most of said franchises, licenses, or easements grant rights not limited within the respective municipalities or counties, but some are limited to particular streets or highways or to portions of the respective counties or municipalities. Some of the franchises, licenses, or easements purport to grant the right to construct and occupy the streets and highways with electrical facilities; some

of said franchises, licenses, or easements purport to grant, for the purpose of engaging in the business of selling and distributing electricity, the right to occupy the streets and highways; and some of said franchises, licenses, or easements purport to grant the right to occupy the streets and highways with electrical facilities and to engage in the business of selling and distributing electricity within the respective municipalities and counties [fdg. 28, r. 599-600, app. I, 19-20].

These local franchises, licenses, or easements merely confer the privilege of occupying streets and highways with electrical facilities in connection with the carrying on of the utility business. They are not franchises or certificates of convenience and necessity to engage in the business of selling electricity. fact appears from the record and also from the constitutions and statutes and from the decisions of the The pertinent constitutional and statutory States. provisions confer on the municipalities and counties only the power to withhold consent to the use of public streets and highways or to grant such consent upon appropriate conditions (see, e.g., labama Const., art. XII, sec. 220; Alabama Code (1928) secs. 2016, 7017, 7024, 7035; Kentucky Const., sec. 163; Mississippi Code (1930) secs. 2400, 2401, 2414; Williams' Tenn. Code (1934) secs. 3326 (5), 3326 (6)).

The nature of such street and highway franchises was explained in *Bland* v. *Cumberland Tel. & Tel. Co.*, 33 Ky. Law 399, 109 S.W. 1180 (1908). In that case the defendant was sued for breach of contract and fail-

ure to provide and maintain connecting facilities as required by the contract in question. The defense was made that the complainant was operating without a franchise to occupy the streets and highways. The complainant replied that none of its lines occupied the public streets. The court held that the reply was good, and explained the nature of a municipal street franchise as follows:

It is not, as sometimes seems to be thought, the right to operate a telephone exchange in a city. That right is not one to be granted or denied by the municipality any more than it could grant or refuse a franchise to conduct a dry goods store within the city. The franchise under discussion is the permission to do something which the city has the right of control over—that is, the occupancy of some part of the public streets [109 S.W. at 1181].

Cf. Mayor of Knoxville v. Africa, 77 Fed. 501, 507 (C. C.A. 6th, 1896).

A case which did not arise in any of the States here involved but which has been widely cited and is perhaps the leading authority on the subject is Bartlesville Elec. L. & P.Co. v. Bartlesville I.Ry.Co., 26% Okla. 453, 109 Pac. 228 (1910). There the court said, in explaining the nature of a franchise to use the streets and highways:

The general subject of the ordinance is the granting of the franchise to construct, maintain, and operate an electric light and power plant. The statement of this purpose in the language of the title carries with it the suggestion that the ordinance gives to the grantee the right to use the streets and public grounds for that purpose, and it would occur to any one from the title that such was the object of the ordinance, for the granting of the right to construct and operate a light and power plant in fact conveys no other right than the right to use the streets and public grounds. Unless the grantee desires the use of the streets and public grounds, a franchise is not necessary: but it would be difficult, if not almost impossible, to construct and operate such a plant without the use of the streets and public grounds, and the right to do the former suggests the latter as a necessary incident thereto [109 Pac. at 230].

Such is the limited scope of the local franchises, licenses, or easements of appellants. At best they may be claimed to confer protection against the exercise of a similar privilege—the occupancy of streets and highways—without a similar grant or under a void grant. Cf. Memphis Street Ry. Co. v. Rapid Transit Co., 138 Tenn. 594 (1917); Montgomery v. Orpheum Taxi Co., 203 Ala. 103 (1919); Consolidated Elec.L.Co. v. People's Elec.L. & G.Co., 94 Ala. 372 (1892); People's Transit Co. v. Louisville Ry. Co., 220 Ky. 728 (1927); Bland v. Cumberland Tel. & Tel. Co., supra; McInnis v. Pace, 78 Miss. 550 (1901). No case has been cited by appellants, and we know of none, in the courts of the States in question which extends the protection of the local franchise beyond this point.

It is therefore of the utmost significance that appellants have not alleged or attempted to prove that the Authority is in fact occupying the streets or highways of counties or municipalities with electrical facilities. In fact, with insignificant exceptions, no such use could be shown.⁴⁵ Furthermore, whether necessary or not and whatever the nature of the street franchises or easements, the Authority has in fact secured permission from the municipalities and counties for use of the streets and highways, as the proof introduced by complainants shows (comp. exs. 214-223, 225-264, r. 3022-3026, 3026-3037). And appellants have made no effort to establish the invalidity of any easement in use by the Authority.

State "franchises": The facts with respect to the so-called State "franchises" upon which appellants rely (br. 61-63) are set forth in a stipulation entitled "Stipulation Respecting Incorporation and Domestication of Complainant Companies" (comp. ex. 2, r. 2450; cf. fdgs. 1, 6-23, r. 585-597, app. I, 1, 2-16). These so-called "franchises" confer, of course, only the right to do business as a corporation; indeed, practically all of the appellants were incorporated in States other than those in which they operate and have merely qualified under the general laws with respect to the do-

The occupancy by the Authority of streets within city limits is and will be practically negligible in view of the fact that the cities own and operate the distribution facilities. Practically all of the Authority's lines are built on its own rights-of-way. For example, in Tennessee the Authority owns altogether only about ten miles of transmission lines which occupy public streets or highways, and most of these were sold to the Authority by appellant The Tennessee Electric Power Company. In Alabama the Authority has less than five miles of line occupying public streets or highways. As pointed out in the text, for this limited use of the streets and highways the Authority has obtained county and municipal licenses.

ing of business by foreign corporations (fdgs. 6-23, r. 585-597, app. I, 2-16; see, e.g., Public Acts of Tenn. (1877) ch. 31, as amended by Public Acts of Tenn. (1891) ch. 122, and Public Acts of Tenn. (1895) ch. 81). Cf. Tennessee Eastern Elec. Co. v. Hannah, 157 Tenn. 582 (1928). Surely it cannot be contended that such qualification affords the basis for an action to restrain competition. Cf. Railroad Co. v. Ellerman, supra.

The appellants, so far as appears, have obtained no certificates of convenience and necessity such as would entitle them to enjoin unauthorized competition under the doctrine of the Frost case. At the time the appellants entered into the utility business in the respective States no such certificates were required. In short, the States did not hold out to appellants any grant of immunity against competition on the part of others. Statutes in Alabama, Kentucky, and Tennessee have established requirements for certificates of convenience and necessity for extensions of existing systems (Alabama Code (1928) sec. 9795; Carroll's Ky. Stat. (1936) sec. 3952-25; Williams' Tenn. Code (1934) secs. 5502-5503). The only evidence submitted with

None of the appellants, except the Franklin Power & Light Company (comp. ex. 21, r. 2498), have been required to obtain commission approval of their charters required under section 5453 of Williams' Tennessee Code (1934), and the Franklin Power & Light Company is not threatened with any competition (fdg. 111, r. 625, app. I, 57).

The pertinent statutory provisions are the following: Tennessee: Public Acts of Tenn. (1875) ch. 142 (providing for incorporation for mining and manufacturing purposes), as amended by Public Acts (1909) ch. 127 (authorizing incorporation for the purpose of carrying on certain utility businesses); Public Acts (1877) ch. 31 (providing for the qualifying of foreign corporations to do business in the State of Tennessee), as amended by Public Acts (1891) ch. 122, and Public Acts (1895) ch. 81; Mississippi: Mississippi Code (1930) sec. 4130 et seq.; Alabama; Alabama Code (1928) secs. 6964, 7036, 7193 et seq.; Kentucky: Carroll's Ky. Stat. (1936) sec. 538 et seq.

None of the appellants, except the Franklin Power & Light Company

respect to the seeking of certificates of convenience and necessity consists of certain orders of the Public Service Commission of Alabama approving certain extensions of lines by the Alabama Power Company (comp. ex. 88, r. 2559). So far as appears, however, the certificates of this one company do not involve the territory outside the ceded area in which the Authority is alleged to be competing with the company.⁴⁷

The case is no better for appellants even assuming the appellants have certificates of public convenience and necessity in the same category and conferring the same rights as the type of franchise involved in the Frost case. Appellants themselves have pointed to the statutory exemption of the Authority from the jurisdiction of the public service commissions but have not attacked the validity of such exemption as being discriminatory under the fourteenth amendment. It is only by showing that this statutory exemption is discriminatory under the fourteenth amendment that appellants can challenge the Authority's failure to secure similar franchises or licenses. No such constitutional objection has been advanced in the bill of complaint or in the appeal to this Court. The validity of such statutory exemption and the classification by the States might well rest on the distinctive character of the Authority as a public, nonprofit undertaking.

The appellant companies operating in Tennessee may have received commission approval (under sec. 5453 of Williams' Tenn. Code (1934)) of street franchises or easements granted by some counties and municipalities in which they claim to be threatened with competition. Since, as pointed out supra (p. 170), the Authority does not use the streets and highways so as to require the municipal and county franchises or licenses, it would not require commission approval irrespective of the statutory exemption of the Authority.

quite apart from any question of the validity of its operations under the Federal Constitution. ** Cf. Alabama Power Co. v. Cullman County Elec. Membership Corp., 234 Ala. 396 (1937). But since the question has not been presented, it is unnecessary to pursue it further.

It was held in the Frost case that the grant of a franchise by a State confers protection against similar but invalid grants made to others. It has never been supposed that such a State franchise confers or purports to confer protection against actions of the Federal Government. The principle of the Frost case was, it is submitted, correctly interpreted by Judge Parker in Carolina Power & Light Co. v. South Carolina Public Service Authority, 94 F. (2d) 520 (C.C.A. 4th, 1938), cert denied, 58 Sup. Ct. 1048:

Plaintiffs rely upon the case of Frost v. Corporation Commission, 278 U.S. 515, 49 S.Ct. 235, 73

The only contention appellants have made concerning this exemption is that the States may not enlarge the powers granted the Federal Government (cf. br. 180-186). So far as the right to sue is concerned, the only pertinent question would be whether, apart from the constitutional validity of the Tennessee Valley Authority Act, the States may exempt the Authority from commission jurisdiction.

The cases of Campbell v. Arkansas-Missouri Power Co., 55 F. (2d) 560 (C.C.A. 8th, 1932); Arkansas-Missouri Power Co. v. Kennett, 78 F. (2d) 911 (C.C.A. 8th, 1935); Kansas Gas & Elec. Co. v. Independence, 79 F. (2d) 32 (C.C.A. 10th, 1935), cited on page 196 of appellants' brief, represent the limits to which any federal court has extended the holding of the Frost case. In these cases it was held that a company holding a municipal franchise may attack the legality of acts of the municipalities in making contracts or borrowing funds for purposes of competition. It is unnecessary in the present case to consider whether those decisions improperly extended the rule of the Frost case, since here no action of the States or municipalities is attacked. (Cf. Carolina Power & Light Co. v. South Carolina Public Service Authority, 94 F. (2d) 520, 525 (C.C.A. 4th, 1938), cert. denied, 58 Sup. Ct. 1048, in which the soundress of these decisions is questioned.) None of these cases went so far as to hold that a municipal franchise holder may attack the validity under federal law of acts of a federal agency.

L.Ed. 483; but the extent of the holding there was that the holder of a nonexclusive franchise was entitled to enjoin the competition of one who was subject to but did not comply with the franchise requirements of the same statute. The rationale of the decision is that a state statute regulating a business affected with a public interest and requiring a determination of public convenience and necessity creates a quasi monopoly for those engaged therein and gives them a right to enjoin competition by those who have not complied with its provisions [94 F. (2d) at 524].

There is no attack in the present case on the acts of the Authority under State law or upon the State laws themselves under the fourteenth amendment. The attack is directed solely at the acts and the power of the Federal Government. Against such acts, local easements and franchises to use public ways obviously confer no standing to complain.

The conclusion seems inescapable that appellants have no greater standing to complain of competition than would any ordinary corporation engaged in any business; and in such circumstance, the *Ellerman* case is controlling.

2. MOST OF THE APPELLANTS LACK STANDING TO MAINTAIN THIS SUIT EITHER BECAUSE THEY ARE ESTOPPED OR BECAUSE THE AUTHORITY IS NOT ENGAGED IN OR THREATENING ANY ACTIVITIES IN THEIR CLAIMED TERRITORIES.

Even assuming that the appellants, as a class, may challenge alleged competition by the Authority, most of the particular appellants are not entitled to maintain this suit. For the record in this case discloses facts that, upon accepted principles of equity, preclude all or some of the appellants from asserting any rights against the appellees.

(a) Complainants in whose claimed territory the Authority is not carrying on or does not threaten to carry on any activities: As to nine of the complainants, it is undeniable on the record that in no part of their territory has the Authority built or authorized any transmission line, sold or authorized the sale of any electricity, or contracted for or authorized contracts for the sale of any electricity by others in that territory. The district court found on the testimony of witnesses for the complainants, representing each of the companies mentioned, the following:

The Tennessee Valley Authority is not now constructing and has not authorized the construction of any transmission line, has not sold or authorized the sale of any electricity, and has not entered into or authorized any contracts for the sale of electricity in any part of the territory claimed by the complainants Franklin Power & Light Company, Appalachian Electric Power Company, Carolina Power & Light Company, Holston River Electric Company, Kingsport Utilities, Inc., Kentucky & West Virginia Power Company, Tennessee Eastern Electric Company, Birmingham Electric Company, East Tennessee Power & Light Company, and Mississippi Power & Light Company, except that it has constructed a transmission line at the expense of the War Department connecting the Authority's lines to the site of Sardis Dam in the claimed territory of the Mississippi Power & Light Company [fdg. 111, r. 625, app. I, 57].50

A court of equity will not enjoin the carrying out of a great public enterprise at the instance of complainants so situated. As this Court said in Mc-Cabe v. Atchison, T. & S.F.Ry.Co., 235 U.S. 151:

The desire to obtain a sweeping injunction cannot be accepted as a substitute for compliance with the general rule that the complainant must present facts sufficient to show that his individual need requires the remedy for which he asks [p. 164].

Insofar as these complainants are concerned, it is clear that the following language of the opinion in the Ashwander case is applicable:

The pronouncements, policies and program of the Tennessee Valley Authority and its directors, their motives and desires, did not give rise to a justiciable controversy save as they had fruition in action of a definite and concrete character constituting an actual or threatened interference with the rights of the persons complaining. The judicial power does not extend to the determination of abstract questions. Muskrat v. United States, 219 U. S. 346, 361; Liberty Warehouse Co. A. Grannis, 273 U. S. 70, 74; Willing v. Chicago Auditorium Assn., 277 U. S. 274, 289; Nashville, C. & St. L. Ry. Co. v. Wallace, 288 U. S. 249, 262, 264 [297 U.S. at 324].

The Holston River Electric Company is not a party to this appeal, its motion to dismiss having been granted by this Court.

It is enough to say of the case of these complainants that:

Claims based merely upon "assumed potential invasions" of rights are not enough to warrant judicial intervention. *Arizona* v. *California*, 283 U. S. 423, 462 [id. at 324-325].

the legality of activities of the Authority in their claimed territories: Of the remaining complainants, four are subsidiaries of the Commonwealth & Southern Corporation, namely, Alabama Power Company, Mississippi Power Company, The Tennessee Electric Power Company, and Southern Tennessee Power Company (fdg. 99, r. 623, app. I, 54; def. ex. 135, r. 4171, 4174-4175). The record shows that the great bulk of the transmission lines belonging to the Authority are located in the territory claimed by these complainants (cf. comp. ex. 327 in Reproductions of Certain Original Exhibits Submitted by Appellants with def. ex. 136A in Reproductions of Certain Original Exhibits Submitted by Appellees).

The Alabama Power Company, the Mississippi Power Company, and The Tennessee Electric Power Company⁵¹ were parties to the contract of January 4, 1934. Under this contract these complainants voluntarily accepted and received many benefits from the

The complainant Southern Tennessee Power Company operates enly as a transmission company transmitting electric energy from Wilson Dam to the Alabama-Tennessee line, thereby connecting Wilson Dam and the transmission system of The Tennessee Electric Power Company. It is not presently engaged either in the distribution, generation, or sale of electric energy (fdg. 112, r. 626, app. I, 58). It is acting solely as an agency and instrumentality of The Tennessee Electric Power Company.

Tennessee Valley Authority Act and from the acts of defendants pursuant thereto which are challenged here; they have affirmatively contributed to the execution of many of the activities of the Authority now complained of; they have purchased over one billion kilowatt-hours of electric energy from the Authority (fdg. 196, r. 643, app. I, 82; fdgs. 102-110, r. 623-625, app. I, 54-57).

Insofar as the sale of power is concerned, these complainants have continued their purchases, since the Ashwander decision, in a greater degree and from additional sources operated by the Authority. Norris Dam began generating power on July 28, 1936, and Wheeler Dam on November 9, 1936 (fdg. 250, r. 654, app. I, 98). All power purchased by the Alabama Power Company and The Tennessee Electric Power Company after these dates was supplied from an interconnected pool, including the power generated at each of these dams (ibid.). In the last seven months of 1936 the sales to the Commonwealth and Southern system constituted 83% of the total Tennessee Valley Authority sales (fdg. 251, r. 654, app. I, 98). Furthermore, in those seven months, during which the stream flow of the Tennessee River was abnormally low, the total amount of power so purchased by the Commonwealth and Southern companies (552,562,368 kwh) was more than the total which could have been generated at Wilson Dam without the benefit of releases of stored water from Norris Dam (ibid.), and in three months of that period these companies purchased more power from the Authority than could have been generated by Wilson Dam alone, even with the benefit of the stored releases from Norris Dam (ibid.).

In the Ashwander case four members of the Court were of the opinion that the mere purchase of power from the Authority before and after the signing of the contract of January 4 was sufficient to estop the Commonwealth & Southern Corporation and its subsidiaries from attacking the validity of the sale of power by the Authority, under the familiar principle that one who avails himself of the benefits of a statute will not be heard to assail its validity. (See 297 U.S. at 341.) The majority of the Court apparently confined its consideration to the purchase of electric energy by the power company prior to its entrance into the contract in question, holding that, while this prior purchase "may have a bearing upon the question before us," "it is by no means controlling" since "The contract in suit manifestly had a broader range" (Ashwander v. Tennessee Valley Authority, supra at 323). We construe the decision to mean that the acceptance of benefits under one provision of an act of Congress does not preclude an attack on the validity of separable provisions, but we do not understand this Court to have held that the provisions under which the benefits were acquired may likewise be challenged. The decision would otherwise be difficult to reconcile with the settled precedents which were accepted as authoritative in the Ashwander case itself. Cf. Great Falls Mfg. Co. v. Attorney General, 124 U.S. 581; Wall v. Parrot Silver & Copper Co., 244 U.S. 407; St. Louis Co. v. Prendergast Co., 260 U.S. 469.

The purchase of power has an important bearing upon the question in this case, since one of the primary contentions of the complainants in this suit is that the electricity at the dams is illegally acquired and that the Authority has therefore no right either to sell the power at the dam or to transmit it to the market. It is difficult to see how these complainants, who have purchased such a large proportion of the electricity generated by the Authority, can be heard to challenge the legality of the sale of such electricity by the Authority to others. Indeed, it should be observed that the Alabama Power Company is even now purchasing power from the Authority which is transmitted to the company and delivered at the city gates for distribution in several municipalities in northern Alabama served by the company. The sale and method of disposition of power to the Alabama Power Company is not different in any material respect from the sale and method of disposition of such power to other purchasers (fdg. 128, r. 629, app. I, 62; Barry, r. 870-871). Here the record shows a complainant seeking to challenge the legality of the sale and delivery to municipalities of electricity from the same source as that delivered to the complainant and over the same transmission facilities used to serve the complainant.

The complainant members of the Commonwealth and Southern system have not only purchased power from the Authority but have accepted the benefits and assisted in the execution of the "broader range" of activities contemplated by the contract of January 4, which are of the identical type challenged here. Under

that contract the Alabama Power Company and the Mississippi Power Company sold to the Authority the transmission lines, substations, and rural lines of those companies in six counties in Alabama and ten counties in Mississippi, together with the franchises, contracts, and going business attaching to those properties, in return for valuable considerations (fdgs. 102, 103, 105, r. 623-624, app. I, 54-56). That absolute conveyance necessarily precludes these companies from attacking the sale of power by the Authority in this so-called "ceded" area. Further, the contract by its express terms contemplated the very types of activity and indeed some of the same actual deliveries as those now sought to be challenged.

These appellants have accepted the benefits of the Authority's agreement under the contract to refrain from selling to other customers outside of a particular specified area (def. ex. 143A, sec. 7, r. 4195, 4199). As part of the consideration they consented under provisos of this contract to the Authority's sale of power to many municipalities and rural areas outside the territory served by the facilities conveyed, and the Authority is now serving such municipalities and rural areas and has provided facilities therefor (fdgs. 107, 108, 109, r. 625, app. I, 56, 57). They have sold lands to the Authority for the Wheeler Dam site (see Ashwander v. Tennessee Valley Authority, supra at 316). They have delivered power essential to the construction of other projects, including Norris and Chickamauga Dams (fdg. 110, r. 625, app. I, 57).

This record, it is submitted, serves to make the present case a more clearly appropriate one than was the Ashwander case for the application of the principle that a party who avails himself of the benefits of a statute may not attack its validity. Great Falls Mfg. Co. v. Attorney General, supra; Wall v. Parrot Silver & Copper Co., supra; St. Louis Co. v. Prendergast Co., supra. To grant the relief requested by the bill would secure to these very complainants the same monopolistic position with reference to the benefits of power at these dams that they enjoyed at Wilson Dam before the passage of the Tennessee Valley Authority Act.

3. THE ONLY COMPETITION WHICH WILL CAUSE DAMAGE TO ANY OF THE COMPLAINANTS IS THE COMPETITION OF THE MUNICIPALTIES AND COOPERATVES, AND SUCH COMPETITION DOES NOT INVOLVE LEGAL INJURY.

Apart from the considerations discussed in the previous section, the of the complainants are entitled to challenge the validity of the Authority's activities because the character of the service does not give rise to competition between complainants and the Authority.

The claims of the West Tennessee Power & Light Company,⁵² the only complainant not discussed in the preceding section, are typical of the claims of the limited number of complainants in whose claimed territory the Authority is selling power, and hence a discussion of the problem in terms of that company's

Other parties to the action in the trial court, namely, the Tennessee Public Service Company, the Holston River Electric Company, and the Kentucky-Tennessee Light & Power Company, have withdrawn from the appeal on their own motion. The situation as to the Memphis Power & Light Company is discussed supra, p. 5.

situation may be helpful even though other complainants may be concerned.

Competition by municipalities: The first question presented is whether or not the West Tennessee Power & Light Company (and any other complainant similarly situated) may challenge the validity of the Authority's delivery of power at wholesale to the city of Jackson, Tennessee, for distribution by the municipality in competition with complainant. The complainant can show a threat of substantial damage due to the loss of customers to the municipal distribution system. But the competition will be that of the city and not of the Authority. As shown by the findings of fact, the Authority stands in the relation of a wholesaler to municipalities and cooperatives, which are autonomous public bodies (fdgs. 135-147, r. 630-632, app. I, 65-68) owning and operating their own distribution systems (fdgs. 130-131, r. 629, app. I, 63). The municipal competition is not here challenged as unlawful, nor could it be in view of the decisions of the State courts. See Oppenheim v. Florence, 229 Ala. 50 (1934); Tennessee Public Service Co. v. Knoxville, 170 Tenn. 40 (1936); Memphis Power & Light Co. v. Memphis, 172 Tenn. 346 (1937); Kentucky-Tennessee L. & P.Co. v. Clarksville, Tenn. Sup. Ct., 1937 (see app. II, 132).

This situation presented by the threatened competition of the city is in all essential respects similar to that presented in Alabama Power Co. v. Ickes, supra, and Duke Power Co. v. Greenwood County, 302 U.S. 485 (cf. West Tennessee P. & L.Co. v. Jackson, 97 F.

(2d) 979 (C.C.A. 6th, 1938), cert. denied, Oct. 10, 1938, No. 239). As was there pointed out, the loss of business due to lawful municipal competition, even though the competition is made possible by grants of federal funds challenged as invalid and even though the complainants are franchise holders, constitutes no legal injury. It is immaterial whether the United States furnishes funds for the construction of a competitive municipal system or the wholesale supply of electric energy to such a system. In neither case is the United States threatening to compete with the existing utility for its power business. Indeed, the similarity of the present case to the Duke Power case is particularly marked, for there the federal funds were furnished to construct not merely a municipal distribution system but a municipal generating system as well, and thus the permanent supply of electric energy was made possible by the challenged federal grant.

It may be argued by appellants that the cases should be distinguished because here the activity of the Authority in selling energy to the municipal system is more continuous than in the case of the grant of funds for the construction of such a system. But the essential feature in both cases is that the threatened competition is that of the municipality and not of the United States. Moreover, the Alabama Power and Duke Power decisions rested on prior decisions involving a relationship to the competition which was more continuous than the giving of funds. Railroad Co. v.

Ellerman, supra, was cited by the Court as "directly in point." There the plaintiff sought unsuccessfully to enjoin the execution of a lease of property by a railroad for use as a wharf on the ground that such a use was ultra vires. There the railroad was continuously the owner and supplier of the property used in competition, no less than the Authority will be the continuous wholesale supplier of the electricity to be used by the municipalities in competition. Similar cases are United States v. Dern, 68 F. (2d) 773 (App.D.C., 1934), cert. denied, 292 U.S. 642, and Milwaukee Horse & Cow Comm. Co. v. Hill, 207 Wis. 420 (1932), both cited in the Alabama decision. No different question is raised with respect to complainants' standing to challenge the Authority's contracts with any other municipality.

Tennessee Power & Light Company (and any other complainant similarly situated) may not challenge the validity of the power sales contract between the Tennessee Valley Authority and the Southwest Tennessee Electric Membership Corporation. This Southwest Tennessee Electric Membership Corporation, like the other cooperatives to whom the Authority is selling electricity, is a State-chartered organization which purchases its power at wholesale from the Authority, owns and operates its own rural distribution system, and sells to the rural residents the power which it purchases at wholesale from the Authority (fdgs. 132, 136-141, r. 629-631, app. I, 63, 65-66).

The legality of competition by these rural cooperatives with complainant power companies is settled. See Alabama Power Co. v. Cullman County Elec. Membership Corp., supra. As in the case of the municipalities, any competition with appellant is that of the cooperatives. The decisions in the Alabama and Duke Power cases are directly applicable.

Any contention that competition by these rural cooperatives is in fact competition by the Authority because of the allegation that the Authority is instrumental in establishing them is in the teeth of the findings of the court: that these cooperatives have been established by the residents of the various communities on their own initiative (fdg. 142, r. 631, app. I, 67); and that whatever part the Authority has taken in the construction of distribution facilities (see fdgs. 133-134, r. 630, app. I, 64), it has not continued to participate in the conduct of the affairs of the cooperatives except to supply power to them at wholesale under the contracts (fdgs. 144, 145, 147, r. 632, app. I, 67-68)

Contracts with industrial concerns: If the Commonwealth and Southern companies are permitted to maintain this suit despite their acceptance of benefits under the Tennessee Valley Authority Act, an additional question will be presented with respect to them. That question is the right of those companies to challenge the Authority's contracts with industrial concerns for the sale of power in bulk lots for industrial use. All of these industrial customers are located either in the area ceded by the Commonwealth and Southern companies under the contract of January 4, con-

sidered in the Ashwander case, or in the claimed territory of the Commonwealth and Southern companies.

None of the industrial customers outside the ceded area, purchasing or under contract to purchase power from the Authority, were previously served by any of the complainants (fdgs. 208, 212, r. 645, 646, app. I, 86, 87). All the industrial customers outside the ceded area are large electrochemical or electrometallurgical companies which constitute new loads in the territory (fdgs. 150, 151, r. 633, app. I, 69). Their requirements include a large amount of secondary power, for which the operations of such industrial plants are peculiarly adapted (fdgs. 153, 154, 156, r. 633-634, app. I, 70). The complainants do not maintain excess capacity and facilities for meeting such large and unusual loads as those of these industrial customers but must construct facilities required for service to such companies (fdg. 152, r. 633, app. I, 69). No showing was made by complainants that any of these new industrial loads, with one exception, would have constituted a probable market for complainants' power.53 The one exception is the Monsanto Chemical Company, which had negoti-

The Volunteer Portland Cement Company contract is not involved. The company (the Tennessee Public Service Company) serving that con-

cern has withdrawn from the appeal.

The references in footnote 2 at pages 192 and 193 of appellants' brief relating to alleged competition for industrial contracts should receive a careful examination. There was no evidence offered that complainants wanted, tried to secure, or were able to serve the new loads brought in by the Victor Chemical Company, the Aluminum Company, or the Electro-Metallurgical Company. The record references cited on these contracts are merely to the reprints of the contracts in the recent annual report of the Authority.

The reference to the competition for the business of the L. N. Gross Company has no significance in view of the fact that the Authority has no contract with that concern, which buys its power from the Lincoln County Electric Membership Corporation, a wholesale purchaser from the Authority (Karr, r. 2203).

ated with The Tennessee Electric Power Company (Willkie, r. 1503-1504). The complainants' own witness testified that the company did not have facilities available from which the load of the industrial concern could have been supplied (Miller, r. 1115).

The only proof offered by the complainants bearing directly upon the question of damage to them because of these industrial contracts was that they maintained large staffs whose duty it was to interest industrial concerns to locate on the lines of the companies, and that they had made substantial sales to new industries over a period of years. They did not connect this effort to any industrial contract of the Authority, save that of the Monsanto Company. This evidence, in a record where it is undisputed that the complainants, and particularly the Commonwealth and Southern companies, are faced with a shortage of power in the next few years unless new generating capacity is acquired (fdgs. 236-237, r. 652, app. I, 94-95; comp. ex. 372 in Reproductions of Certain Original Exhibits Submitted by Appellants; Middlemiss, r. 1272-1274), is not a sufficient showing of legal injury to entitle the complainants to challenge the legality of these industrial contracts. Cf. Alabama v. Arizona, 291 U.S. 286, 292.

What has been said sufficiently demonstrates that the threatened damage of which appellants complain will not be due to competition by the Authority. The alleged threat of a loss of rural business illustrates the point. Complainants even now assert that there is little or no unattached rural demand now unserved

which could be served economically. (See, e.g., Street, r. 978; Ostermueller, r. 991; Bonner, r. 1006-1007; Jacobs. r. 1016). This is the position complainants have always taken with reference to rural service, and it explains why the rural residents served by the cooperatives under contract with the Authority have been heretofore without any electric service. The record shows that, apart from the customers served by the lines acquired under the contract of January 4, only two of the rural residents served by the cooperatives under contract with the Authority had ever been served by complainants (fdg. 206, r. 645, app. I, 85). Complainants cannot reasonably complain of damages by reason of the loss of a market which they have heretofore regarded, and still consider, unprofitable (fdg. 249, r. 654, app. I, 98).

Complainants' case is no better with respect to the alleged competition for the wholesale municipal markets under contract with the Authority. Complainants never offered to prove that, but for the Authority, these municipalities would have purchased their power supply from complainants, the municipalities' competitors. The alleged competition with the Authority for the wholesale business of the municipalities is in fact wholly theoretical and unreal. The Authority's sale to certain large industrials may appear to constitute direct competition with certain of the complainants. But even this industrial demand is of a specialized type for use in electrochemical and electrometallurgical industries representing new business in the area which, for all that appears, became

economically feasible only because of Tennessee Valley Authority rates. Surely complainants cannot demand a monopoly of a market created by the Authority itself.

Complainants' franchises confer no right to sue without a showing of special damages. Memphis Street Ry. Co. v. Rapid Transit Co., 138 Tenn. 594, 605-606 (1917); Northern Pac. Ry. Co. v. Bennett, 83 Mont. 483 (1928). If, as complainants assert, the threat of the loss of potential future markets may constitute a sufficient showing of damage, the fact nevertheless remains that the customers served by the Authority were not potential customers of complainants, and the service of such customers by the Authority constitutes no loss or damage to complainants.

Should the Court decide that none of these contracts, whether they be with municipalities, rural cooperatives, or industrial concerns, present a definite and specific transaction which is a proper subject of controversy between the parties to this case, appropriate for an exercise of judicial power, it will be decisive of this whole litigation. For if the complainants cannot challenge the validity of these contracts, surely they cannot challenge in the abstract the validity of the construction and operation of the generating plants, the transmission lines, and the substations being used to deliver power thereunder. The Authority's so-called "power program" does not present a justiciable controversy. See Ashwander v. Tennessee Valley Authority, supra at 324. There must be some specific subject

or transaction which is susceptible of judicial determination. See *United States* v. West Virginia, 295 U.S. 463; New Jersey v. Sargent, 269 U.S. 328. This was the holding in the Ashwander case in limiting the decision to the contract of January 4 between the Authority and the Alabama Power Company.

Regardless of this Court's decision on the merits, the importance of a careful delineation of the standing of the various complainants to challenge the validity of varied types of transactions need hardly be emphasized. The gravity of constitutional questions has led this Court to formulate special rules governing the scope and character of the inquiry in constitutional cases. The application of these special salutary rules is sought to be blurred by the sweeping, multifarious character of complainants' case. Complainants' bill of complaint was designed to obscure the fact that acts challenged have no specific application to many of the parties complaining, to discourage careful analysis of the right to sue, and to elicit general sweeping rulings.

It was in recognition of the principles governing the presentation of constitutional issues for adjudication that the Government sought to have the bill dismissed on the ground that it was nonjusticiable and fatally multifarious. See Government's petition for certiorari, 301 U.S. 710.

The paramount public importance of restricting the scope of the federal judicial power to actual cases or controversies based upon definite allegations of specific injury to particular parties is self-evident. If the important rules so carefully established by this Court to govern the scope and character of inquiry into constitutional questions are to be preserved and given practical application, the rights of the complainants in a suit of this nature should be clearly delineated.

IV

THERE IS NO REVERSIBLE ERROR IN THE RULINGS OF THE TRIAL COURT-ON EVIDENCE AND PROCEDURE.

The rulings of the court below on evidence and procedure were unanimously concurred in by three judges sitting as a court of equity (r. 2439). Appellants have nevertheless devoted a substantial part of their brief (pp. 214-247) to the contention that the case should now be sent back for a new trial because of errors in such rulings.

There are 135 numbered assignments of error in all, about half of which relate to rulings on evidence and procedure. Appellants have made no attempt to limit their assignments. They indiscriminately press practically every exception they took during the course of the long trial, even to the extent of assigning error to the exclusion of documents which were actually admitted into evidence, and to the refusal to order production of documents authentic copies of which were admittedly in complainants' possession. (See, e.g., assignment 4, r. 717; br. 221; cf. comp. ex. 113 (original) p. 22, r. 2684; assignment 59, r. 733; br. 246 (n. 1); cf. r. 2421.)

The numerous assignments are vague and general in stating the grounds of error and are carcless and unreliable. The treatment of the assignments in appellants' brief only adds to the confusion. The method is to group the various rulings under general subjectmatter headings and, without any explanation of the particular circumstances surrounding each of these rulings, to state in conclusory language that the proffered proof was relevant to one of the myriad allegations in the bill whether or not they presented a material issue.

The assignments are directly in violation of Supreme Court Rule 9 (28 U.S.C. 862) and of the repeated and emphatic admonitions of this Court. The confusion resulting from appellants' failure to make the assignments clear and explicit justifies a complete disregard of them. See Phillips and C.Const.Co. v. Seymour, 91 U.S. 646, 648; Central Vt. Ry. Co. v. White, 238 U.S. 507, 508; Chesapeake & D. Canal Co. v. United States, 250 U.S. 123, 124; Seaboard Air Line R.Co. v. Watson, 287 U.S. 86, 91; Local 167 v. United States, 291 U.S. 293, 296. Far from tending to "define the issues," the assignments of error merely present "bewildering" and "prolix" confusion. See Local 167 v. United States, supra at 296; Phillips and C. Const. Co. v. Seymour, supra at 648.

Appellants' general basic contention is that they were deprived of their right "to make a full presentation of their case" by the court's rulings. An attempt is made to build up a picture of hasty, ill-considered, and unfair treatment. An examination of the volume

and content of the record conclusively refutes this contention.

As pointed out in the statement (supra pp. 7-10), the facts concerning the conduct of the case and the trial indicate the full and fair character of the hearing. The extensive proceedings and arguments in connection with earlier motions and appeals, the scope of the stipulations and depositions, together with the length of court time consumed in the presentation of proof, the voluminous record of testimony and exhibits, and the lengthy arguments heard and numerous briefs filed throughout the trial (r. 2371), all reflect the opportunity afforded the parties to make a full presentation of the case. Appellants' contention that the court unduly expedited the case (br. 214-215) is answered by the statement of counsel made in open court:

Mr. R. T. Jackson: I did not mean to imply that there had been any undue expedition of the case. I was concerned and am concerned about the question of oral argument, and I thought it my duty to frankly state that to the Court, because it seems to me that is a matter of importance [r. 2284].

Appellants' assignments of error to the fixing of dates for arguments and presentation of findings of facts and briefs (assignments 63-66, r. 735-736) are indicative of the complete lack of merit, if not indeed the frivolousness, of the contention that they were denied a fair trial. There clearly can be no doubt of the court's discretion in these matters. But the record leaves no doubt of the court's reasonableness. On De-

cember 20, that is, almost a month in advance, the court notified counsel that it expected to proceed promptly with the arguments and findings upon the close of the testimony. The court made this announcement just prior to a twelve-day adjournment at the Christmas season (r. 1861). The court stated that it felt justified in asking counsel to use part of this holiday period in preparation of arguments, briefs, and findings so that the case could be disposed of promptly at the conclusion of the testimony (r. 1862, 1919). The judges had come from distant points, and none of them were at or near their regular places of court duty. Attention was drawn to the facts that the case had been pending for almost two years; extensive proceedings had been held over a long period of time; most of the issues had already been thoroughly analyzed and argued by counsel; and both sides had ample counsel representing them, three large firms actively appearing for complainants (r. 1861-1862, 2282-2284).

The record shows that the trial court adopted the liberal policy of admitting evidence even when there was grave doubt as to its admissibility (r. 1492, 2284). The district court repeatedly accepted on behalf of complainants evidence of highly doubtful competence or relevance. (See, e.g., the voluminous exhibits regarding applications to, and loan and grant agreements with, the Public Works Administration, comp. exs. 419-434, r. 3249-3331; the highly speculative testimony of the witnesses Frothingham, r. 1304-1310, and Moreland, r. 1470-1480; the testimony and excerpts regarding applications to and licenses from the Federal

Power Commission, r. 864-865, comp. exs. 91-94, r. 2560-2602.)

Complainants attempted to secure court orders for the production of numerous documents, and some of these requests were denied for reasons which are discussed below in disposing of particular assignments of error. But it may throw light upon the court's rulings generally to consider the documents and data that were given complainants or that were available to them.

The partial denial of complainants' main subpoena duces tecum was expressly conditioned upon delivery by defendants of all contracts relating to the disposition of power and all records of official action of the Board of Directors of the Authority relating to the dams and to the transmission lines or other facilities for the disposition of power or relating in any way to the sale of power (r. 766, 896-897). In compliance, defendants delivered to complainants 367 separate items of board action, constituting the complete record of the action taken by the Authority from its inception to date in regard to the generation and disposition of electric energy (r. 896). The numerous board exhibits, incorporated by reference in nearly all these items, were made available for the examination of complainants, and copies of any that they desired were given to them (r. 897). Every contract which the Authority had ever entered into involving or in any way relating to the disposition of power was likewise delivered to complainants (r. 764, 766, 897).

Complainants were also furnished, by stipulation, with a complete description of every line that the Authority had ever built or authorized for construction, including location, capacity, and places to be served, and a description of every substation that the Authority ever built or authorized, including its capacity, location, and places intended to be served by it (def. ex. 136, r. 4175). This stipulation contained maps and tables showing all of the lines and substations of the Tennessee Valley Authority, in service, under construction, and authorized as of October 15, 1937. (For map see def. ex. 136A in Reproductions of Certain Original Exhibits Submitted by Appellees.) The stipulation further contained a map showing all rural lines owned by municipalities and cooperatives purchasing power from the Authority, and rural lines owned by the Authority, together with tables containing the detailed information concerning all of such rural lines. (For map see def. ex. .136B in Reproductions of Certain Original Exhibits Submitted by Appellees.)

The foregoing documents and data were not only delivered to complainants; all of them were admitted in evidence (comp. exs. 117-181, r. 2729-2959; comp. exs. 516-627, r. 3357-3477; def. ex. 136, r. 4175). In addition to the contracts, board resolutions, allotment releases, and other information furnished complainants by the defendants, complainants had numerous other sources of information regarding the Authority's plans for the construction and operation of dams and the disposition of power. The pertinent facts concern-

ing the Tennessee River system were exhaustively set forth in the comprehensive report of the Army Engineers in 1930, House Document No. 328 (comp. ex. 105 (original), r. 2615). Detailed information as to the scope, design, location, general methods of operation, and functions of the dams, as well as details regarding the transmission lines, substations, and power contracts, were fully set forth not only in the Authority's regular annual reports and in the report entitled The Unified Development of the Tennessee River System (comp. ex. 328 (original), r. 3068) but also in the ten volumes of published hearings held before committees of the Congress on appropriations for the Authority and amendments to the act. Such hearings, held annually by at least one House of the Congress and in several years by both, have been characterized by the exhaustive examination and cross-examination to which committee members subjected officials of the Authority concerning all its plans and operations. Exhibits which the Authority was required to file in connection with such hearings and the detailed testimony given in them covered every phase of the Authority's activities. All these materials were available to complainants long before the trial, and they were offered and admitted in evidence on their behalf (comp. exs. 108, 109, 112, 113, 114, 115, 116, 364, 365, 366 (originals), r. 2623, 2643, 2681, 2684, 2691, 2699, 2727, 3109, 3121, 3125; comp. exs. 117, 118, r. 2729, 2771).

Finally, in considering the character of the trial, it is relevant to note the nature of the case which com-

plainants attempted to make out in the bill. The bill of complaint occupied 71 printed pages (r. 1) and the exhibits thereto 66 pages (r. 72). The bill contained sweeping allegations challenging the validity of a "national power policy" and "the power program of the defendants," attacking not only specific acts allegedly done or threatened but also mere prospects or suggestions for the indefinite future, and involving numerous diverse complainants in whose claimed territory defendants had neither done nor threatened any action of a definite or concrete character (fdg. 111, r. 625, app. I, 57). The Government's motion to dismiss for multifariousness was overruled (r. 158), but at the time of that ruling (over a year before the trial), and frequently thereafter, the district court pointed out that there was much surplusage in the bill (r. 904, 1492, 1532). Complainants, however, took the position throughout the trial that they were entitled to introduce evidence on all and any of the sweeping allegations made in the bill. The contention, as baldly stated in appellants' brief, is that "any evidence which tends to support an issue between the parties is admissible" (p. 218). The possibility that some of the allegations might relate to immaterial issues is disregarded, and the function of the trial court to determine the materiality of and intelligently delineate the issues is ignored. This function is of particular importance in a case tried before a special three-judge court from which a direct appeal is prosecuted to this Court.

Appellants have repeatedly cited such cases as Chastleton Corp. v. Sinclair, 264 U.S. 543; Hammond

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v. Schappi Bus Line, 275 U.S. 164; and Borden's Farm Products Co. v. Baldwin, 293 U.S. 194, for the proposition that in constitutional litigation an adequate hearing requires the trial of all the issues and the admission of all evidence deemed material or relevant by the party tendering the proof (br. 217-218). This novel contention finds no support in the cases cited. In each of the cases the trial court took decisive action without any trial. There is no suggestion in these authorities that because a case involves constitutional questions the trial court's important function of ruling on the scope of the issues and admissibility of evidence shall be abandoned. In the instant case complainants were accorded the fullest trial to which any litigant may be entitled. The rulings on evidence and procedure assigned as error were all a part of the important process by which the trial court delineates the issues and sifts the evidence.

As the volume of admitted evidence demonstrates, there was abundant concrete evidence to show the action of the Authority. Most of the excluded evidence consisted of discussions, arguments, informal speeches, press releases, informal communications, informal correspondence, reports from subordinates, and the like. All of the excluded evidence was incompetent, irrelevant, or purely cumulative, having no legal bearing on the issues before the court. In any event, appellants have failed to show any prejudicial error which would justify the remanding of a case of this character.

Any effort to answer fully the assignments of error will consume space and attention disproportionate to their importance. Nevertheless, the incomplete and, in many instances, inaccurate discussion in appellants' brief necessitates consideration in this brief of some of the particular rulings which are emphasized by appellants.

1. THERE IS NO REVERSIBLE ERROR IN THE RULINGS OF THE COURT RELATING TO COMPULSORY PRODUCTION OF DOCUMENTS AND SUBPOENAS DUCES TECUM (assignments 1, 2, 5, 15, 25, 27, 28, 37, 38, 42, 44, 47, 59).

All of the above assignments of error relate to the rulings of the court denying the motion for the production of documents in advance of trial and the numerous applications for subpoenas duces tecum presented throughout the trial. In their brief appellants have apparently abandoned those assignments relating to the denial of the motion to produce documents in advance of trial. A general understanding of that motion and the ruling of the court thereon is essential, however, to an understanding of the rulings on subpoenas duces tecum, since all of the subsequent applications for subpoenas were based upon the original motion and were clearly directed to the same ends.

The purpose of the original motion to produce, as well as of the subsequent applications for subpoenas, was to procure as much detailed information as possible to assist complainants in the preparation of their case prior to trial. Laying aside for a moment the fact that neither a motion to produce documents nor a subpoena duces tecum was designed for this purpose, the

fact is that complainants were not handicapped in their efforts to procure such information. As already pointed out, all of the information and sources of information that could be regarded as even remotely competent—the contracts, board resolutions, allotment releases, reports to the Congress, and the published hearings before congressional committees—were available to complainants either before or at the trial and appear in the record as exhibits.

The fact is that by the motion to produce and the various subpoenas complainants were not seeking material evidence but were asking blanket permission to ransack the files and records of the Authority in the hope of unearthing something that might prove helpful to them or embarrassing to the Authority.

In addition to these considerations, the rulings of the trial court upon the preliminary motion to produce documents and the various applications for subpoenas were well within its discretion and are supported by indevendent procedural grounds. A brief examination of the particular motions, together with the rulings of the court, is sufficient to show that the discretionary action taken on these matters need not be disturbed upon appeal.

Motion to produce documents in advance of trial and applications for subpoenas duces tecum (assignments 1, 2, 5, 15, 47, r. 715-717, 720, 728). The motion to require the production of documents in advance of trial (assignment 1, r. 715) was a preliminary motion supposedly filed under Equity Rule 58. The reasons for the denial of that motion are dis-

eussed in the opinion of the trial court upon the subject (r. 379), which is fully supported by the authorities. Fidelity & Deposit Co. v. Central Bank, 48 F. (2d) 477 (C.C.A. 8th, 1931); Pressed Steel Car Co. v. Union Pac.R.Co., 241 Fed. 964 (S.D.N.Y., 1917).

The application for blanket subpoena duces tecum and the various separate applications for subpoenas for the minutes of meetings of the Board of Directors of the Authority (assignments 2, 5, 15, r. 716, 717, 720) were in large measure complied with by stipulation. At the time the original application was made the court heard argument only with respect to the items listed in the first paragraph of said application. At the time of that argument counsel advised the court that the defendants had already agreed to furnish copies of all contracts described in paragraph 2 of the subpoena, as well as the maps of transmission and distribution lines and substations described in paragraphs 8 and 9 thereof, and that therefore those items need not be considered (r. 764-765).

After the argument on paragraph 1 of the subpoena, which called for all minutes of the Board of Directors of the Authority, the court denied the request for subpoena for these minutes upon condition that counsel for the defendants should deliver to opposing counsel all contracts made by the Authority and all resolutions authorizing or relating to contracts for the sale of power, the construction or authorization of dams, the construction or authorization of transmission lines, distribution lines or substations, and all resolutions dealing with sales and construction contracts (r. 766-767).

The remaining paragraphs of the original blanket subpoena called for intra-Authority "discussions," "considerations," "memoranda," or "notes" (r. 2441).

As to these and similar documents the original application was properly denied on the ground that there was no prima facie showing that the documents called for were competent, relevant, and material, which is a condition precedent to the issuance of a subpoena duces tecum. Hale v. Henkel, 201 U.S. 43, 77; Federal Trade Comm. v. American Tobacco Co., 264 U.S. 298, 307; General Finance Corp. v. New York State Rys., 1 F.Supp. 381 (W.D.N.Y., 1931); Miller v. Mutual Reserve Fund Life Ass'n, 139 Fed. 864 (C.C.S.D.N.Y., 1905); Schuricht v. McNutt, 26 F. (2d) 388 (D.Conn., 1928): Dancel v. Goodyear Shoe Mach. Co., 128 Fed. 753 (C.C.D.Mass., 1904). Moreover, the sweeping and burdensome breadth of this particular application justified its denial. The practical effect of the issuance of such a subpoena would have been to sweep out the files of the Authority. This Court, as well as the lower federal courts, has consistently condemned sweeping subpoenas of this type. Hale v. Henkel, supra; Federal Trade Comm. v. American Tobacco Co., supra; Miller v. Mutual Reserve Fund Life Ass'n, supra; Jones v. Securities Comm., 298 U.S. 1, 26; Hoppe v. Ostronder & Co., 183 Fed. 786 (C.C.S.D. N.Y., 1910); Rawlins v. Hall-Epps Clothing Co., 217 Fed. 884 (C.C.A. 5th, 1914); In re American Sugar Ref. Co., 178 Fed. 109 (C.C.S.D.N.Y., 1910).

After the denial of the original application, complainants, in an effort to meet the ruling of the court requiring a prima facie showing of relevance and materiality, broke the original application into separate subpoenas (comp. exs. 497, 689-697, 931, 954-956, r. 3331, 3618-3625, 3982, 4002-4004). The first of these would have required the production of a copy of a telegram from the Authority to the Governor of Alabama with reference to certain legislation then pending before the Legislature of Alabama (r. 1437). The materiality and relevance of this document as evidence is discussed *infra*, page 239.

The second of these subpoenas (comp. ex. 689, r. 3618) would have the defendants to produce documents and records showing the number of employees in the department of electricity as of October 1, 1937, the headquarters or offices of each of said employees, and the names of any additional employees in that department other than those published in the annual report of the Authority for the fiscal year ending June 30, 1937. In response to this application the court required the defendants to state in the record the number of employees in the department of electricity and denied the remainder of the subpoena upon condition that that information be furnished (r. 1528).

The remaining applications for subpoenas, except for the particular instances considered hereinafter, related to letters, memoranda, intradepartmental communications, and board minutes, identical with the items listed in the original subpoena (r. 1529-1531). The immateriality of this type of evidence, which is the ground upon which the rulings of the trial court were based, is considered *infra*, pages 235-239.

The application for subpoena duces tecum for the report on a proposed dam at the Norris site, made by an employee of the Bureau of Reclamation of the Department of the Interior (assignment 47, r. 728) calls for special consideration in view of appellants' inaccurate statement of the facts in this regard. The record shows that this report was delivered by the Authority to the court at the court's request in order that it might inspect the same and determine whether or not any sufficient showing had been made to justify its compulsory production as material evidence in the case. Appellants state in their brief (p. 227) that the Tennessee Valley Authority had employed the Bureau of Reclamation to prepare plans for the construction of Norris Dam, and that this report was made to the Authority by an officer of the Bureau of Reclamation. This statement is inaccurate and contradicted by the record. The nature and status of this report is fully explained by the testimony of the witness Woodward (r. 1816-1818). As pointed out in the unanimous opinion of the trial court denying this application, it appears from that testimony that this report was in no sense an official report of the Bureau of Reclamation to the Authority but was merely a report or recommendation of a subordinate member of the staff of that Bureau to its own chief engineer, setting out the personal opinions and estimates of this particular employee (r. 2197). The witness Woodward, the chief water-control planning engineer of the Authority who was active on the design work of Norris Dam, testified

that so far as he knew the Authority had never requested that this report be made, and that no use had been made of it. He also stated that he personally never did agree with the report, and that he did not think it had any official standing (r. 1816-1817). There is nothing in the record tending to show that this report was ever adopted by the Board of Directors of the Authority or relied upon in any way. If complainants desired to rely upon opinions of the writer of this report, they could have complied with the requirements of judicial procedure by eliciting his testimony under oath, either on the witness stand or by deposition.

The application for subpoena duces tecum for certain tentative and confidential budget estimates submitted to the Appropriations Committee of the House of Representatives in executive session on December 13, 1937 (assignment 59, r. 733), was denied on the ground that complainants had in their possession at the trial a complete photostatic copy of these estimates (r. 2419-2422). Counsel for the Authority had conceded the authenticity of that copy. In response to the assertion that the subpoena for the board resolutions and administrative directions for the operation of the Authority's dams (comp. ex. 956, r. 4004) was denied (br. 239), it should be noted that all of the documents so described were submitted and received in evidence (r. 2418-2419, 2428-2433, 2437-2438; see comp. exs. 923, 924, r. 3955-3975; comp. ex. 957, r. 4004; def. ex. 41, r. 4065; def. ex. 65, r. 4078).

2. THERE IS NO REVERSIBLE ERROR IN THE RULINGS OF THE TRIAL COURT ON THE ADMISSIBILITY OF SPEECHES, PRESS RELEASES, PAMPHLETS, ETC. (assignments 4, 8-12, 17, 24, 29, 30, 43, 44).

The materials included in this group of assignments of error are (a) press releases which either reproduce speeches of individual directors, announce the terms and conditions of contracts for the sale of the Authority's power, or refer to plans or policies of the Authority (assignments 4, 8, 12, 44, r. 717, 718, 719, 728); (b) testimony of witnesses to the effect that individual directors and employees of the Authority made certain statements regarding power contracts and policies at public meetings (assignment 11, r. 719); (c) the testimony of Director Lilienthal at the congressional committee hearings on the Holding Company Act (assignment 10, r. 719); and (d) contract forms and pamphlets purporting to give information on the Authority's power contracts and sales (assignments 9, 17, 24, 29, 30, 43, r. 719, 721, 723, 724, 727). Appellants in their brief devote a whole page to an attempt to show that the court acted arbitrarily in excluding the press releases (pp. 220-221). The record shows that the court heard and considered arguments and briefs on the admissibility of these items (r. 894) and "examined and considered each and all of the press releases offered" (r. 1532).

This type of evidence was excluded on the ground that it was incompetent or cumulative, as well as on the ground that it was irrelevant (r. 894, 1532). Insofar as any of these materials contain facts, as distin-

guished from opinion, they were purely cumulative, since better evidence of the same facts was available and was introduced in the form of the contracts actually executed, the official board resolutions, and the Authority's clear and complete official reports to Congress, all of which were admitted into evidence. These materials were clearly the best evidence "to show what appellees had done" and "were doing" (br. 222) and had authorized to be done. For example, on page 221 of their brief appellants complain of the action of the trial court in excluding two press releases embodying the announcement of the Authority's so-called power policy (comp. ex. 633, r. 3487) and the announcement of the Authority's proposed wholesale and retail rates (comp. ex. 634, r. 3490). The record shows that the complete statement of the power policy, as well as the rate schedules, are fully set out on pages 22 and 35 of the annual report of the Authority for the fiscal year ending June 30, 1934, which was offered and received in evidence as complainants' exhibit 113 (r. 919-920, 2684). What individual directors, subordinate employees, or press releases had to say about these matters could hardly add anything to the facts themselves. Thus, even assuming that these press releases contained relevant evidence, at best they were merely secondary and cumulative evidence which the court in its discretion properly excluded.

Insofar as these materials related to expressions of policies and possible plans, their lack of probative value rendered them incompetent. The speculative and remote character of the inferences sought to be drawn

from them is obvious. The only evidence which has any probative value consists of the official acts of the board of directors as such. The fact that publication of the speeches and opinions of the individual directors was generally authorized does not alter their character as expressions of individual opinion. In preserving to the complainants their right to place before the court all evidence of official acts of the board of directors. the trial court freely admitted in evidence not only the official acts of the board but also all of the testimony of members of the board of directors before various committees of the Congress, which testimony contains the fullest possible discussions of all of the policies and plans, both actual and projected (comp. exs. 108, 109, 112, 114, 115, 116, 364, 365, 366 (originals), r. 2621/ 2623, 2674, 2684, 2691, 2700, 3092, 3110, 3121). speeches and press releases intended for public consumption can only suggest the give and take that is necessarily involved in the formulation of policy and in the making of ultimate decisions by the board. They cannot be taken to represent official action.

It seems apparent that complainants' only purpose in seeking to introduce such evidence was to reflect upon the motives and subjective mental attitudes of the individual directors and employees of the Authority. The trial court properly held the evidence irrelevant on this ground. It was the position of the court that the trial should be limited to concrete and definite action taken or authorized by the Authority and should not go into "motives, declarations, pronouncements, desires," and "policies" (r. 894, 1532). This posi-

tion was clearly in accord with, if not required by, the decisions of this Court in the Ashwander and Isbrandtsen and other cases. Ashwander v. Tennessee Valley Authority, 297 U.S. 288; Isbrandtsen-Moller Co. v. United States, 300 U.S. 139; Dakota Cent. Tel. Co. v. South Dakota, 250 U.S. 163; West v. Hitchcock, 205 U.S. 80; Anicker v. Gunsburg, 246 U.S. 110. See also Duke Power Co. v. Greenwood County, 91 F. (2d) 665 (C.C.A. 4th, 1937); South & N.A.R.Co. v. Railroad Comm., 171 Fed. 225 (C.C.M.D.Ala., 1909). If the concrete official acts done-in the case at bar the construction of dams, the execution of contracts, and the construction and acquisition of facilities for the sale of power-are, viewed objectively, authorized by a constitutional statute, they are valid. As aptly stated by Judge Sibley in his concurring opinion in the Circuit Court of Appeals in the Ashwander case:

This case is not to be decided by the purposes and plans of the board, but by the validity of what is about to be done under the attacked contracts [78 F. (2d) 578 at 583].

In their brief appellants tacitly concede that evidence of the motives and purposes of the members of the board of directors would have been immaterial and contend that the evidence herein questioned was offered for other purposes (br. 223). Yet an examination of the argument which follows in appellants' brief makes it clear that the only real purpose of the proffered proof was to establish those motives and purposes.

In their brief appellants argue that the release of any information regarding the activities of the Authority is "advertising," and that "advertising" is in turn "solicitation" of customers (pp. 224-225), and that "solicitation" is in some way unlawful. All of the press releases, pamphlets, and public statements are claimed to be relevant on this tenuous basis. Appellants have placed so much emphasis on this contention that it is here discused at some length.

3. THE TRIAL COURT DID NOT COMMIT REVERSIBLE ERROR IN EXCLUDING CERTAIN EVIDENCE PURPORTING TO SHOW SO-LICITATION (assignments 8-12, 17, 24, 29, 30, 43).

Appellants' theory apparently is that every statement ever made by any director or employee of the Tennessee Valley Authority, and any information published, constituted solicitation of appellants' custo-Even if it be conceded that the ultimate conclusion of this reasoning—the fact of solicitation—is a proper issue in a case in which the court is asked to determine the constitutional power of the Federal Government to construct dams and to generate and distribute electricity at such dams, the reasoning is clearly The dissemination of information to the fallacious. public concerning the activities of a public agency would seem to be obviously proper and indeed necessary. Insofar as the release of such information may have reacted unfavorably upon the appellants, no legal injury has been inflicted. Cf. Standard Scale Co. v. Farrell, 249 U.S. 571; Pennsylvania R.R.Co. v. United' States R.R. Labor Board, 261 U.S. 72; United States v. Los Angeles R.R., 273 U.S. 299.

Such of the statements as might have evidenced any pertinent fact would have proved no more than that the Authority and its employees were informing the public generally that the Authority had power available and, in a general way, of the rates, terms, and conditions on which the sales would be made. As the court pointed out, counsel for the Government conceded that the Authority announced to the public that there was a certain amount of power available at certain rates (r. 1134), and further conceded that when requests or applications were received from persons or communities, information was sent out in reply to the requests received (r. 982-983).

The excluded evidence would have added nothing to the fact as found by the court that the Authority's rates have been published generally and are well known throughout the valley (fdg. 124, r. 628, app. I, 61). None of the evidence offered was at variance with the finding to the effect that advice and information was sent out "upon request" (fdg. 143, r. 632, app. I, 67; see also op., r. 553, app. I, 127; comp. ex. 412, r. 3244).

All of this evidence, however, was also clearly incompetent. No proof was offered, for example, to show that the Authority had any connection with the distribution of the circulars and pamphlets referred to in assignments 9, 24, 29, and 30. The statements in appellants' brief (p. 230) that these materials were circulated and distributed by the Authority are unsup-

ported by the record. Complainants' own witnesses testified that they had not at any time seen any Tennessee Valley Authority employee circulate them (Stanley, r. 951, 955; Street, r. 981-982, 983; Green, r. 1008; Woodall, r. 1323-1324), and counsel for the complainants conceded that they had no evidence that the Authority was connected with the distribution of them (r. 952-954). So far as the speeches and statements referred to in assignment 11 (r. 719) are concerned, most of them were statements made by subordinate employees of the Tennessee Valley Authority in informal conferences or at public meetings (Bass, r. 1087; Woodall, r. 1321; Mastin, r. 1327; Burleson, r. 1395-1396; Armington, r. 1357-1358; Gause, r. 1359; Kittredge, r. 1361; Mouldin, r. 1324; McWhorter, r. 1441). Cf. United States v. Martin, 26 Fed. Cas. 1186, 1187 (C.C. N.D.N.Y., 1832); Lee v. Munroe, 11 U.S. 366, 368-369; Waters v. United States, 4 Ct. Cl. 389, 390 (1868); Allen v. United States, 28 Ct. Cl. 141, 146 (1893): Carroll v. East Tenn., Va. & Ga. Ry. Co., 82 Ga. 452 (1889); West Jersey Traction Co. v. Camden Horse-Railroad Co., 53 N.J.Eq. 163 (1895).

The other statements referred to in assignment il consisted of public speeches made by individual directors. (See Lamar, r. 1130.) On the principles established by the above-cited cases, what individual board members discussed or stated in unofficial public speeches cannot be regarded as competent proof against the Authority. Insofar as it appeared that an individual board member was negotiating in an official capacity, the court admitted into evidence statements

made by such director. Thus, the witnesses Wilkerson and Bass were permitted to testify regarding statements made by Director Lilienthal in conferences concerning the city of Chattanooga (r. 1086, 1047).

Where complainants offered any evidence which purported to show that any customers or potential customers had been induced to contract with the Authority, as distinguished from evidence showing the release of information for publication, the evidence was admitted. But in this respect complainants' case failed completely. In the few instances where complainants purported to show specific solicitation, they merely demonstrated that their charge was groundless. The Yates Bleachery instance referred to on page 230 of appellants' brief (assignment 17, r. 721) is illustrative. While the court excluded as incompetent a pencil memorandum made by a subordinate employee of the Authority on a piece of scratch paper, it admitted almost the entire deposition into evidence (r. 1140, 1143). It appeared from this deposition that the Yates Bleachery Company was not purchasing power from any of the complainant power companies at the time of the conversation with the Tennessee Valley Authority employee and had not been purchasing power from them or from anyone for almost a year prior to the time of such conversation (r. 1141, 1145, 1147). It further appeared that this company had only taken supplementary service from a Tennessee Electric Power Company subsidiary and its load had been only about 30 kw (r. 1144). And finally, the deposition showed that the bleachery company had never had a contract to take power from the Authority and the Authority never sold any power to it.

Another example of the weak character of the evidence on which the complainants' charges of solicitation were based is the resolution of the city of Moulton, Alabama, referred to in assignment 43 (r. 727-728). Aside from the fact that the city of Moulton is in the "ceded area" under the contract of January 4, 1934, the witness McWhorter testified that the city of Moulton did not have any contract with the Tennessee Valley Authority (r. 1442).

These representative examples offered by complainants can scarcely be regarded as proof of the "high-pressure solicitation" charged. Certainly complainants failed to prove any damaging effects in these trivial instances since in each instance it appeared that the Authority had secured no contract. It is significant that these numerous complainants had to resort to such trifling individual instances to support their charge. The failure to procure substantial evidence establishes that the claimed fact does not exist; and the trial court so found (fdgs. 227, 228, r. 649, app. I, 92).

- 4. THE TRIAL COURT DID NOT COMMIT REVERSIBLE ERROR IN EXCLUDING ITEMS OF EVIDENCE PURPORTING TO PROVE CO-ERCION, DURESS, FRAUD, OR CONSPIRACY (assignments 12, 31, 32, 33, 38, 39).
- (a) Evidence relating to correspondence between the Authority and other Government agencies (assignments 12, 31, 32, 33, 38, 39). Appellants assign as error the exclusion of a voluminous mass of correspon-

dence and communications etween the Authority or its employees and the Federal Emergency Administration of Public Works, the Rural Electrification Administration, the Electric Home and Farm Authority, and the National Power Policy Committee; the correspondence between these agencies and numerous municipalities and rural cooperatives; and various reports, memoranda, and press releases concerning these various agencies. These rulings are argued on pages 233 to 236 of appellants' brief. The trial court excluded this material on the grounds that the case should be limited to the validity of the activities of the Tennessee Valley Authority and could not be concerned with the activities of other Government agencies and local public agencies, none of whom were parties to the case (r. 906). No extended argument is needed to demonstrate the soundness of this position. It was a practical necessity in this case. If complainants had been permitted to introduce their proposed evidence on the activities of other Government agencies and of the various local agencies, the case would have involved a trial on the legality not only of the Tennessee Valley Authority Act and the activities thereunder, but also of the statutes governing and the activities of the Public Works Administration, the Rural Electrification Administration, the Electric Home and Farm Authority, the National Power Policy Committee, and the local agencies. It is clear that as to these matters the real complaint is against action alleged to be in excess of the powers of these other agencies, questions which the trial court properly refused to consider in a case already overburdened with diverse issues.

This evidence is claimed to be relevant to prove "cooperation" or "confederation or concert of action" to injure appellants (br. 233-234). This is the same "conspired" charge made in numerous other suits by power companies and sought to be supported by the identical documents and evidence proffered here by complainants. The identical conspiracy charge made here was advanced in the Ashwander case and was rejected by District Judge Grubb on the ground that if the Tennessee Valley Authority was authorized by its statute to do what it was doing, and the Public Works Administration was authorized by its statute to do what it was doing, there could be no illegality in the cooperation between them:

If the T.V.A. has the right to engage in the business of making and selling electric current . . . for final distribution to consumers, the P.W.A. has the right and power to loan, to the municipal corporations, money to construct distributing plants for electric power to be furnished by the T.V.A. to them [9 F.Supp. 800 at 801].

In the case of Memphis Power & Light Co. v. Memphis, 172 Tenn. 346 (1937), the Supreme Court of Tennessee similarly disposed of the same conspiracy charge as follows:

It is further charged that these federal agencies, the state, and the city of Memphis have entered into a conspiracy to injure or destroy the business of complainant. If the involved contracts are valid, necessarily there is no basis for such a charge [p. 366].

The charge of conspiracy is really an attempt to show that the Public Works Administration was improperly motivated in making loans and grants by a desire to provide a market for the Authority's power. This charge was tried out in the cases brought to enjoin the making of loans and grants, and the charge was found to be without basis in fact. Alabama Power Co. v. Ickes, 302 U.S. 464. The same company, with its co-complainants here, now seeks to retry the issue in a suit to which the Public Works Administration is not a party.

The repeated efforts on the part of complainant power companies to draw substance from matters relating to the Electric Home and Farm Authority (br. 235) should be disposed of once and for all. This Court over two years ago recognized that the agency referred to in this case was dissolved (Ashwander v. Tennessee Valley Authority, 297 U.S. at 316). All of the correspondence, memoranda, and press releases which were excluded related to this defunct agency (assignment 12, r. 719). Obviously, these materials can have no bearing on the validity of the Tennessee Valley Authority Act or the Authority's activities.

It may be noted that the court admitted in evidence a mass of material bearing upon these irrelevant questions, including all of the applications and contracts of the Public Works Administration in the Tennessee Valley area; the contract between the Author-

ity and the Electric Home and Farm Authority; and all of the construction loan contracts between rural cooperatives and the Authority pursuant to projects of the Rural Electrification Administration offered by the complainants (comp. exs. 419-434, 649, 162-181, r. 3249-3331, 3554, 2895-2960), as well as the depositions of the officers of the cooperatives explaining the details of their relationship with the latter agency (r. 1334, 1353, 2258, 2269). The only evidence excluded consisted of letters exchanged between individual employees of the various agencies and intradepartmental communications.

(b) The trial court acted within its discretion in denying complainants' motion for leave to take the deposition of the Public Works Administrator (assignment 32). Appellants, on page 234 of their brief, have pointed to the rulings of the trial court denying leave to take this deposition as another example of prejudicial error. Significantly, appellants omit all reference to the circumstances under which these rulings were made. The significant facts are: (1) The complainants had every reasonable opportunity to take this deposition and indeed far more opportunity than that afforded by law; (2) the deposition of the Deputy Administrator, who had full access to the files of the Public Works Administration, was taken and admitted into evidence, along with numerous exhibits identified and authenticated by him; and (3) the evidence complainants proposed to secure from Administrator Ickes was wholly irrelevant. The grounds upon which the ruling of the court was based are

stated in its opinion (r. 381). The ruling is supported by the authorities. Glades County v. Detroit Fidelity & Surety Co., 65 F. (2d) 252 (C.C.A. 5th, 1933); Meyers. Occidental Oil Corp., 283 Fed. 703 (D.Del., 1922). See Duke Power Co. v. Greenwood County, 91 F. (2d) 665 (C.C.A. 4th, 1937); and also the record in Alabama Power Co. v. Ickes, 302 U.S. 464.

5. NO REVERSIBLE ERROR WAS COMMITTED IN THE RULINGS OF THE TRIAL COURT EXCLUDING CERTAIN OFFERED EVI-DENCE ON RATES (assignments 13-16, 18, 19, 34).

The excluded evidence referred to in this group of assignments, and argued on pages 236 to 238 of appellants' brief, includes (1) a comparison of the Tennessee Valley Authority rate structures with those of complainant power companies (assignments 13, 34, r. 720, 725); (2) the "regulatory" and damaging effects, however remote, of the Tennessee Valley Authority rates (assignments 14, 16, r. 720, 721); and (3) an inquiry into Tennessee Valley Authority costs, which would necessarily have involved the court in an investigation of the costs of the dams and in the difficult and intricate problem of allocating costs among the different functions such as navigation, flood control, national defense, fertilizer, and power (assignments 15, 16, r. 720, 721).

The record demonstrates that the court had great difficulty in securing from complainants any clear statement as to the relevancy of this testimony. Complainants shifted time and again from one ground to another as the weakness of their position became apparent. Toward the close of their affirmative case,

complainants finally attempted some definite statement of the various grounds on which they regarded this evidence as pertinent. They stated that it was offered for the purpose of showing (1) the nature, extent, and imminence of damage; (2) the regulatory and confiscatory character of the rates; and (3) that the Tennessee Valley Authority has announced rate schedules below cost, in violation of its governing statute. This is the substance of the argument made in appellants' brief (p. 236).

The trial court excluded the evidence on the grounds (a) that the extensive proof proffered by complainants would show no more than the type of damage and the type of "regulation" implicit in the concessions of the Authority, noted below, regarding their rate schedules, and therefore such evidence would be purely cumulative and would unnecessarily involve the court in protracted, complicated, collateral inquiries (r. 946, 1414); and (b) that the detailed proof offered in regard to each independent company and in regard to specific instances relating only to particular complainants did not support the common cause of action (r. 945-946). The statutory point raised by appellants does not affect the soundness of the court's ruling. Since there is no mandatory provision in the Tennessee Valley Authority Act that the Authority's rates be fixed to cover costs, there can be no violation of any duty owed to appellants.

There is ample evidence in the record showing the schedule of rates at which the Authority's power has been sold. The rates are set out in all the contracts

admitted into evidence. And the Government conceded on the record that:

- ... (1) the wholesale rates of the Tennessee Valley Authority are substantially lower than the wholesale rates of any of the complainants [r. 943].
- (2) The retail rates charged by the municipalities and cooperatives purchasing power from the Authority are substantially lower than the retail rates of any of the complainants [r. 944].
- (3) The rates charged by the Authority to the rural customers which it serves are substantially lower than the rates for rural service of any of the complainants [ibid.].
- [4] ... the Authority's rates to the industrials are substantially lower than the published rates of the complainants [r. 946].

This concession is incorporated in the findings of fact (fdgs. 120-123, r. 628, app. I, 61). The court further found:

Tennessee Valley Authority has published these rates generally, and they are well known throughout the Tennessee Valley area [fdg. 124, r. 628, app. I, 61].

Substantial future damage to complainants will result from competition with TVA [fdg. 125, r. 628, app. I, 62].

The testimony offered by complainants was intended to prove that (1) in consideration of the amount of power available at the projects of the Authority, the

power would have to be marketed in substantial parts of the territory served by complainants (r. 1415-1416), and (2) to the extent that the power generated at the Authority's projects would be distributed in competition with complainants, the latter would have to meet the rates at which such power was sold (by the municipalities and cooperatives, it should be noted) in order to retain their business (r. 1416). The trial court received all the evidence offered by complainants on the first point (r. 1253-1259, 1268-1274, 1291-1300, 1451-1463, 1470-1480), as well as the testimony offered by the Government in rebuttal (r. 2087-2107; see also fdg. 238, r. 652, app. I, 95), and the second point was merely a self-evident conclusion.

Moreover, complainants' witnesses Moreland, Frothingham, and others were permitted to give extensive and speculative opinion testimony regarding the effects of the Authority's rates on complainants generally. The court admitted into evidence the opinions of these witnesses as to whether and how the sale of Tennessee Valley Authority power at the Authority's rates would result in curtailing the market of the complainants generally, in reducing the values of their physical properties, in depressing their securities, and in impairing their ability to refinance (r. 1303-1320, 1470-1480; comp. exs. 507-511, r. 3347-3352).

The court drew the line against detailed evidence regarding the different complainant companies singly, such as that offered by the witnesses Longley (r. 972), Stanley (r. 935-957), Newton (r. 1419), Robinson (r. 1265), Addinsell (r. 1427), and Lefferson (r. 1412).

The soundness and reasonableness of the court's position appears from the following statement:

- . . . the Court has in mind constantly in this case that there are a large number of complainants here; the fact that an attack is made upon the bill upon the ground it was multifarious.
- . . . the court considers that to pursue this question of rates with reference to the rates of the TVA and the rates of the various, multifarious complainants, would be going into an infinite amount of detail, whereas the ultimate conclusion would be fairly expressed with reference to these complainants by the concession made that the rates are substantially lower, both wholesale and on resale.
- ... the Court is endeavoring to carry out the holding of the District Court and of the Circuit Court of Appeals, that you all have a common interest, and we are endeavoring not to go into the diversities of the peculiar situations, except in so far as may be competent, material and relevant under this bill in which you allege that you have a common interest [r. 945-946].

Apart from the cumulative and multifarious character of the evidence, the Government submits that the argument on the merits of this case demonstrates its irrelevancy. It is, of course, irrelevant to the issues of the validity of the dams and the acquisition of power therefrom; and in the disposal of that power, as has been shown, broad discretion is vested in Congress to fix the terms. See pages 106 et seq., supra. Appellants'

argument on relevance is that the methods of disposition authorized by the statute have the inevitable effect, through competition and example, of "regulating" the intrastate operations of the appellant companies and are therefore beyond the power of Congress. This notion of regulation finds no support whatever in the authorities, as appears from the argument on the merits (supra pp. 138-139, 154 et seq.).

Having failed to lay a proper basis for presenting this minute and extensive material on cost and rates, complainants finally, toward the close of their affirmative case, introduced for the first time the contention that the evidence was relevant to show a violation of a statutory requirement. The following provision of section 14 of the act is said to be violated (br. 236-237):

It is hereby declared to be the policy of this Act that, in order, as soon as practicable, to make the power projects self-supporting and self-liquidating, the surplus power shall be sold at rates which, in the opinion of the Board, when applied to the normal capacity of the Authority's power facilities, will produce gross revenues in excess of the cost of production of said power . . .

It is difficult to see how this provision could be construed to impose a mandatory duty upon the Authority to charge any particular rate. According to the terms of that section the fixing of the rates is clearly within the discretion of the board. The statute creates no duty toward appellants (sec. 14). These provisions were added to section 14 of the act by amendment in

1935. It is plain on the face of section 14 that it contains no mandatory direction to the board. Language could hardly express more clearly the intention of Congress that the rates were to be determined at the sole discretion of the board. Furthermore, any possible construction that the directions of the Congress are mandatory and the exercise of the board's authority to fix rates is subject to review by the courts is clearly repudiated by the legislative history of the provision.

As the legislative history shows, the language in question was adopted as a substitute for language previously proposed which appeared to be mandatory and to invite litigation. The language finally adopted in the statute was, according to the stated purpose of its sponsors, designed to preclude any possibility of litigation and to constitute merely a declaration of policy, with the determination of rates in the sole discretion of the board.

As originally proposed to the House by the Committee on Military Affairs (H.R. 8632, 74th Cong., 1st sess.), this section was to have read:

After July 1, 1937, the Authority shall not sell the surplus power or chemicals produced by it anually below the cost of the aggregate production for each year [p. 8].

In this form the provision was obviously mandatory. This provision, however, was attacked vigorously within the committee as an "invitation" to "protracted litigation" by "private-utility interests," and it was pointed out that unless revised it would "open the door

to endless litigation involving all the perplexing and vexatious questions of fair value" and "as to the allocation of relative costs on the various projects as between navigation, flood control, national defense, and surplus power" (id. at 31).

The sharp division among the committee on this provision precipitated a lively controversy on the floor of the House and it was finally stricken out in favor of the clause now appearing in the act. In the debate on the amendment finally adopted, it was emphasized that the express purpose of the amendment was to leave the determination of rates within the discretion of the board and to avoid subjecting its discretionary action to judicial review (79 Cong. Rec., 74th Cong., 1st sess., pp. 10961-10966).

The remarks of Chairman McSwain of the Military Affairs Committee of the House in responding to questions on the floor plainly revealed the general understanding of the effect of the amended section 14:

Now, we realize, I think, that we are not now in a position to say what the cost is. We do not have the information. We are not in a position now to say that it shall go on a cost basis right now. I submit that we are not in a position now to say exactly at what definite date in the future we can go on a cost basis . . .

In conference the House amendment was still further liberalized by the insertion of the phrase "in the opinion of the board." The Congress fully appreciated that the guiding purpose and effect of the amendment was to avoid any possibility of litigation over rates, and, at least for the time being, to leave their determination in the discretion of the board, subject only to the advisory declaration of policy by the Congress and such review as it might care to make.

Far from affording any reason for admitting this evidence, section 14, viewed in the light of the legislative history, conclusively illustrates the soundness of the trial court's rulings excluding detailed evidence on rates and costs. Common-sense considerations of orderly trial administration demanded the exclusion of such an endless and futile inquiry. Particularly is this true since, as has been noted, the rates of the Authority were introduced in evidence and were acknowledged to be lower than the rates of complainants. The admission of this voluminous detail on cost, valuation, allocation, and rate structure would have confused the issues, and would have had the effect of shifting the focus of the inquiry from the basic issues of constitutional authority to irrelevant or collateral matters.

6 NO REVERSIBLE ERROR WAS COMMITTED IN THE RULINGS OF THE TRIAL COURT EXCLUDING CERTAIN ITEMS OF EVI-DENCE OFFERED TO SHOW THE RELATION OF THE AUTHOR-ITY TO RURAL COOPERATIVES AND MUNICIPALITIES (assignments 34, 35, 36, 41, 42).

These assignments are discussed together for the reason that they all purport to relate to the exclusion of evidence concerning the nature of the relationship existing between the Authority and the municipalities

and cooperative associations purchasing electricity from it at wholesale (br. 230). In particular, appellants complain of the exclusion of the testimony of the witness Smith (r. 1443-1447), which they claim would have shown subsidies to municipal customers of the Authority (br. 230); testimony taken by depositions of the witnesses Bandy and Pittman dealing with the activities of the North Georgia Electric Membership Corporation, which they claim would have shown the Authority's domination, control, and persuasion of cooperative associations (r. 1329-1330, 1337-1338, 1355-1362; br. 230); testimony of the witness Eaton (r. 1434-1437); and executive messages of the Governor of Tennessee (comp. exs. 686-687, r. 3605, 3617), which they claim would have shown that the Authority had prepared and sponsored special State legislation in Mississippi and Tennessee (br. 231). A reference to the record is sufficient to show that even if otherwise competent this evidence was purely cumulative and unnecessary to the decision of any of the issues in the case.

A large portion of the record is taken up with testimony and documentary evidence designed to set out in complete detail the history, background, and actual mechanics of the relationship between the Authority and its wholesale customers. The best evidence of these facts would appear to be contained in the contracts between the Authority and these customers, and the other related documents and records setting forth in detail the story of how the transmission facilities serving these customers were constructed and financed, as well as evidence as to the manner in which such facilities

were operated by such customers. The record contains all of the power contracts between the Authority and its wholesale customers, including both municipalities and cooperatives (comp. exs. 119-145, 196, 224, r. 2846-2889, 3004, 3026). The record also contains all of the construction contracts, as well as sale and loan contracts, under which the facilities of the cooperative associations were constructed and financed (comp. exs. 162-181, r. 2895-2960). Complainants had access to and offered in evidence the charters, franchises, certificates of incorporation, bylaws, and minutes of meetings of the various cooperative associations (comp. exs. 267-321, 380-384, 387-389, 398-408, 943-953, r. 3040-3066, 3153-3173, 3189-3238, 3996-4002). Furthermore, the record contains all of the resolutions of the Board of Directors of the Authority authorizing or approving the construction, leasing, or sale of facilities and the execution of contracts with the various municipalities and cooperatives (comp. exs. 516-570, 575-577, 582-589, 592-616, 618-626, r. 3357-3384, 3389-3401, 3421-3476). The trial court's extremely liberal attitude in the admission of documentary evidence with even the remotest bearing upon this issue is further illustrated by the fact that all of the Public Works Administration applications and loan-and-grant agreements involving municipalities within the Tennessee Valley were admitted in evidence over the objection of counsel for the defendants (comp. exs. 419-427, 430-445, 451-460, 467, 468, 470-479, r. 3249-3316).

It is further to be noted that the complainants were engaged in the taking of depositions almost entirely devoted to this subject from the middle of July until August 1, 1937. The selection of the witnesses and the subject-matter to be covered by the depositions were matters entirely within the control of complainants. They had full and complete opportunity to obtain by deposition the testimony of all persons familiar with the facts. They took five depositions of the persons in responsible charge of operating these corporations (Pittman, r. 1334; Carmack, r. 1353; Bandy, r. 1356; Cowley, r. 2258; Hutchinson, r. 2269). These depositions contained detailed evidence on the subject, and all of them were admitted, either on behalf of complainants or on behalf of defendants, except the portions relating exclusively to the Georgia Power Company.

The above general summary of the state of the record is sufficient to show the lack of substantial merit in this group of assignments. However, a brief reference to the items specifically mentioned in appellants' brief may be in order.

With respect to the exclusion of the testimony of the witness Smith, appellants now claim much more for this testimony than was claimed by counsel at the trial in his offer to prove. As appears from the record the excluded testimony related solely to the contention that the Authority, under the terms of the contract between it and the city of Athens, Alabama, which had long owned its own distribution system and is served by the Authority through facilities purchased in the contract of January 4, had rendered certain advisory services as to the method of keeping the accounts of electrical operations of the city and had engaged in certain promotional activities during the early stages of the contractual relationship. As stated by counsel in his offer to prove, the purpose of this testimony was to show "that the so-called yardstick set up is a sham" (r. 1446). The record shows that none of the complainants had any facilities in this city (r. 1443, 1446). Certainly they have no standing to complain of the rate structure of such a municipality or its contractual relations with others.

The deposition of the witness Bandy and the portion of the deposition of the witness Pittman excluded by the court related exclusively to the competitive situation existing between the North Georgia Electric Membership Corporation and the Georgia Power Company. The trial court throughout the trial consistently ruled that since the Georgia Power Company had been effectively enjoined by a decree of the United States District Court for the Northern District of Georgia from taking any part in these proceedings, all evidence relating solely to the operation of that company should be excluded. Georgia Power Co. v. Tennessee Valley Authority, 17 F.Supp. 769 (N.D.Ga., 1937), aff'd, 89 F. (2d) 218 (C.C.A. 5th, 1937), cert. denied, 302 U.S. 692. Furthermore, the evidence contained in these depositions was almost identical with and purely cumulative of the evidence contained in the other depositions admitted in evidence with respect to the organization and operation of the various rural cooperatives in the area.

7. THE TRIAL COURT DID NOT COMMIT REVERSIBLE ERROR IN ADMITTING IN EVIDENCE PORTIONS OF THE TESTIMONY OF DIRECTORS OF THE AUTHORITY BEFORE CONGRESSIONAL COMMITTEES OFFERED BY DEFENDANTS TO EXPLAIN AND COMPLETE FRAGMENTARY EXCERPTS FROM THE SAME DOCUMENTS OFFERED IN EVIDENCE BY COMPLAINANTS (assignment 7).

This assignment offers another example of the type of rulings which appellants regard as unfair. While claiming for themselves the right to offer excerpts from the testimony of the directors before congressional committees, appellants objected to the admission of any portions of these same hearings when offered by the defendants (assignment 7, r. 717; br. 225). The trial court received these hearings in evidence over the Government's objection on the theory that they were in the nature of official reports of the Authority to Congress (r. 894). The refusal of the court to admit "fragments" or "isolated or garbled" excerpts, and its requirement that the complete hearings be introduced, was clearly proper (r. 915, 918). A comparison of the excerpts offered in evidence to show the motives of the Authority's directors with those offered by the Government from the same statements demonstrates the necessity of these rulings (cf. br. 43-44, 65-66 with r. 4276-4279, 4287-4288, 4290-4291, 4297-4298, 4321-4322, 4343).

Moreover, it is obvious that no harm was done complainants by the admission of the whole document, since they were permitted to draw the court's attention to the particular excerpts which they considered pertinent (r. 919). There was thus no danger that

the court would mistakenly think that complainants endorsed the entire hearings.

Appellants seem to contend that because their theory of offering these excerpts was that they were admissions against interest, the court erred in considering any portions not offered by complainants (br. 225). This position is untenable, for the rule of documentary completeness would require the admission of other portions of the document, even under appellants' theory of admission against interest. The law is settled that "the opponent, against whom a part of an utterance has been put in, may, in his turn, complement it by putting in the remainder, in order to secure for the tribunal a complete understanding of the total tenor and effect of the utterance" (4 Wigmore on Evidence (2d ed., 1923) sec. 2113). Security Trust Co. v. Robb, 142 Fed. 78 (C.C.A. 3d, 1906); Davis v. Forrest, 7 Fed. Cas. 129 (C.C.D.C., 1811).

8. THE COURT DID NOT COMMIT REVERSIBLE ERROR IN EX-CLUDING EVIDENCE OF INTRADEPARTMENTAL DISCUSSIONS, CONSIDERATIONS, RECOMMENDATIONS, AND REPORTS (assignments 2 (a), 2 (b), 6, 25).

In this group of assignments of error appellants object to the exclusion of various excerpts from corporate minutes relating to "consideration" of "plans" and "policies" (assignments 2 (b), 6, r. 716, 717; br. 229) and to various correspondence between Director Lilienthal and the President of the United States and the Federal Power Commission discussing the situation in regard to rural electric service in the Tennessee Valley (assignment 25, r. 723; br. 232).

As noted above, the court admitted into evidence all resolutions of the Board of Directors of the Authority authorizing action and all records of action actually taken or authorized. It drew the line between discussions, recommendations, negotiations, preliminary plans, and preliminary reports on the one hand, and official action and authorization on the other hand (r. 905). As in the case of the speeches and press releases, the grounds for this distinction were found in the speculative and remote character of this type of evidence and in the rulings of this Court to the effect that the validity of executive action of public officials must be determined by their official acts and not by what they say, consider, or hope.

A brief reference to the items under consideration is sufficient to demonstrate that they do not represent any concrete or official action taken by the Tennessee Valley Authority. Appellants' own description of them is in terms of "consideration," "plans," "objectives," and "policies." (See assignment 2 (b), r. 716.) The excerpts from the "corporate minutes" referred to on page 229 of appellants' brief consist of discussions in board meetings during the early months of the existence of the corporation. None of these excerpts authorized any action. The suggestion that these excerpts were introduced into the instant case by defendants' answer is misleading (br. 229). These excerpts appear as evidence offered by the complainants in the Ashwander case, the entire record of which was attached as an exhibit to defendants' answer in this case for the limited purpose of supporting the special defense of res judicata set up against the Alabama Power Company (r. 251). The correspondence referred to in assignment 25 (r. 723), as already stated, was of a purely informational and advisory character. Here again the only purpose that such materials can serve is to indicate the motives and mental attitudes of their authors.

At most, such discussions and communications constitute only some of the many considerations leading to board action. There can be no doubt that the trial court was well within its discretionary powers in refusing to become involved in the volume of intradepartmental discussions and individual reports requested by petitioners. The court's ruling was in accord with the decision of this Court in the recent case of Baltimore & O.R.Co. v. United States, 298 U.S. 349, in which case complainant attacked the reasonableness of certain rates established by the Interstate Commerce Commission and sought to go behind the findings of the Commission on the basis of the examiners' report. This Court sustained the refusal of the trial court to consider the examiners' official report-stating:

That report is not a part of the record. At the trial appellants offered it in evidence. The commission objected to it on the ground that it is "a mere recommendation of an employee of the commission to the commission." The court sustained the objection. The report of the commission does not disclose the examiners' recommendations but states that its conclusions differ somewhat from those proposed by the examiners. For the reason

given in the commission's objection, upon which the court excluded what the examiners proposed to the commission, the appellants would not have been justified in raising the question of confiscation upon the proposed report [pp. 370-371].

See also United States v. Fox River Butter Co., 61 Treas. Dec. 1047, cert. denied, 287 U.S. 628, wherein the United States Court of Customs and Patent Appeals held the report made by the Tariff Commission to the President irrelevant and inadmissible to show the basis of the President's change in rates, on the ground that the action contemplated by the statute was to be taken by the President and not by the Commission.

There is something more involved than the lack of probative value of this type of evidence. Practical reasons of policy requiring its exclusion have been recognized even where intraoffice memoranda of private corporations are concerned. See Carroll v. East Tenn., Va. & Ga. Ry. Co., 82 Ga. 452 (1889); Missouri, K. & T.Ry.Co. v. Want & Co., 179 S.W. 903 (Tex. Civ. App., 1915); Patterson & Roberts v. Quanah, A. & P.Ry.Co., 195 S.W. 1163 (Tex. Civ. App., 1917). Where the action of a public agency is in issue, the practical reasons for exclusion are greatly enhanced by considerations of public policy. A rule subjecting all intraoffice discussions and conferences to use as formal evidence in litigation would stultify preliminary inquiries and would hinder the free expression and consideration of different points of view vital to sound judgment on important public questions. See Smith v. The East India Co., 1 Ph. 50, 41 Reprint 550 (1841); Kurrle v. Mayor of Baltimore, 113 Md. 63 (1910); Texas Utilities v. Ickes and Alabama Power Co. v. Ickes, record, vol. II, p. 435 (per Wheat, C.J.). Cf. Carroll v. East Tenn., Va. & Ga. Ry. Co., supra.

The executive messages of the Governor of Tennessee (assignment 41, r. 727) and the telegram from the Authority to the Governor of Alabama (assignment 42, r. 727) setting forth certain suggested legislation recommended by the Authority are referred to on pages 231 and 232 of appellants' brief. As stated in the assignments, the purpose of this evidence was to show that the enabling legislation enacted by the legislatures of Alabama, Tennessee, and Mississippi was prepared and sponsored by representatives of the Authority. The court correctly held that complainants would be permitted to show the enactment of the legislation and what had been done under it, but that the court would not receive testimony as to what was said by supporters or opponents of the legislation at legislative hearings (r. 1435-1438). The soundness of this ruling would not seem open to question. When the legislation in question was duly enacted by the properly constituted legislative bodies of the respective States, it became the law of those sovereignties, and any inquiry by the courts into the nature of the support or opposition of such legislation would be clearly improper under the settled doctrines of this Court. Cf. Fletcher v. Peck, 6 Cranch 87, 130-131; American Banana Co. v. United Fruit Co., 213 U.S. 347.

 THERE WAS NO REVERSIBLE ERROR IN EXCLUDING CERTAIN DETAILED EVIDENCE PURPORTING TO SHOW EXTENT OF DAMAGES (assignments 18-23, 26, 49).

Some eight or ten of the assignments of error relate to the exclusion of evidence purporting to show the extent and nature of the damages to complainants as the result of the Authority's activities. Apart from the obvious cumulative nature of this evidence, which in itself would justify its exclusion, all of it is so speculative and remote as to be entirely valueless and irrelevant.

Complainants were permitted to introduce ample evidence on the question of actual damage. At least one representative from each of the eighteen companies was permitted to testify regarding the facilities of each company and to facts implying that the Authority's power sales would displace complainants' markets. In addition, the witness Frothingham freely testified regarding the damage which, in his opinion, would result to complainant companies generally by reason of their inability to borrow money at low interest rates (r. 1303-1319). Such evidence as that offered through the witness Addinsell was excluded because it was either merely repetitious of Frothingham's testimony or consisted of details regarding specific individual complainants (r. 1425-1434). The witness Moreland was permitted to testify extensively on the likelihood that the Authority would displace the facilities and service of complainants (r. 1470-1480). While his specific estimates on the money value of damage were excluded, he was permitted to testify at length on the extent and

character of the damage which would result to complainants from the marketing of the Authority's power (r. 1470). The witness Ford testified generally as to the effect upon complainants should they be forced to reduce their rates to meet those charged by the Authority (r. 1126-1127). And finally, the court found that "Substantial future damage to complainants will result from competition with TVA" (fdg. 125, r. 628, app. I, 62). As the court stated during the course of the trial, this finding "is the only ultimate fact which could be established by entering in detail into the evidential facts as to rates" (r. 1414) or by going into "estimates of money damage" (r. 1480):

... to go into these details would lead us into a remote and collateral inquiry which would not affect the ultimate result [r. 1414].

The excluded evidence consisted merely of exhaustive detail concerning every remote possibility of damage and estimates in dollars of the damages expected to result to each individual complainant. Appellants' theory, as frankly stated in their brief, is that anything tending to show "the size, nature and effect of the entire unitary scheme of TVA" (br. 229) should have been admitted into evidence.

A brief summary of this proposed testimony is sufficient to demonstrate its inadmissible character as well as the confusion that would have resulted if the court had given free rein to complainants' broad theory of admissibility of evidence: estimates as to the amount of money damages to each of complainants, assuming

they were forced to reduce their rates (assignment 18. r. 721); detailed charts estimating the money damages to each of complainants due to expected loss of use of facilities (assignment 19, r. 721); estimates of damage due to inability to borrow money at low interest rates (this testimony including some ten detailed charts, showing a comparison of the yield of the bonds of each of complainant power companies with Standard Statistics Company's average yields of public-utility bonds) (assignment 20, r. 721); testimony as to the depressed value of dams that the Government might possibly acquire sometime in the future under the Federal Water Power Act, including detailed accounts of the work done by complainants on these dams and the cost of such work, the theory being that such depressed values may affect the price the Government will pay if it shall ever exercise its right to acquire such dams (assignments 22, 23, r. 722, 723). It should be noted that the theory upon which this proof was offered was that by the grant of a license under the Federal Water Power Act the Federal Government granted a special privilege to sell the electricity generated at the dam which could not be impaired by future action of the Federal Government-in short, a discredited theory of perpetual estoppel against the Government by its grant of a license. (See Tennessee Elec. Power Co. v. Ickes, 22 F.Supp. 639 (D.C., 1938), aff'd, 58 Sup. Ct. 947; Carolina Power & Light Co. V. South Carolina Public Service Authority, 94 F. (2d) 520 (C.C.A. 4th, 1938), cert. denied, 58 Sup. Ct. 1048.

Equally incompetent and irrelevant was the proposed testimony of Willkie offered to establish efforts of some of the complainants to minimize their damages (assignment 21, r. 722; Willkie, r. 1505), and the proposed testimony of the witness Collier regarding the situation in the State of Georgia (Miller, r. 1110; Longley, r. 995). If this testimony of the witness Willkie had been admitted on the stated theory of showing the willingness of the Commonwealth and Southern companies to purchase power from the Authority, the court would have had to consider such collateral questions as the action of the complainant The Tennessee Electric Power Company in electing to construct an expensive steam plant at Nashville, Tennessee, rather than to purchase power from the Authority (r. 974). As the court pointed out in regard to the collateral and remote character of the Collier testimony, complainants' theory for its admission would have opened the door to evidence concerning any other noncomplainant power company within possible transmission distance of any of the Authority's projects (r. 997-998).

On pages 226-227 of their brief appellants complain of the ruling of the trial court excluding proposed testimony offered to show the average annual value of agricultural crops on lands which had been acquired by the Authority as a part of the reservoir projects. It is clear that the sole purpose of this testimony was to initiate a comparison of the detailed costs of the Authority's projects with the benefits to be derived from one particular function. The fallacy of attempting to determine the constitutionality of the

dams constructed under the statute by this method of comparative costs has been fully discussed in the argument on the constitutional question.

The letters from municipalities offered by the witness Stanley (assignment 26, r. 723), containing statements that they were proposing to construct their own distribution systems in order to secure power from the Authority, were ruled out as incompetent hearsay since the persons who wrote them did not appear to testify to them (r. 956); and they were also irrelevant, there being no legal damage to a private utility by reason of the fact that an authorized public plant draws its customers away by lower rates (r. 1037-1038). Cf. Walla Walla v. Walla Walla Water Co., 172 U.S. 1; Springfield Gas Co. v. Springfield, 257 U.S. 66.

OBJECTIONS TO THE QUALIFICATIONS OF AUTHORITY'S WIT-NESSES WERE FRIVOLOUS (assignments 50, 51, 52, 58).

Appellants refer to most of these assignments in the section of their brief on "the limitation of the scope of rebuttal" (br. 243-247). Appellants' objections to the qualifications of the Government's witnesses on flood control and navigation can hardly be taken seriously (assignments 50, 51, r. 729; br. 246). A review of the record on the qualifications of these witnesses conclusively shows their high degree of training and experience in the subjects on which they testified (Bowman, r. 1689; Woodward, r. 1772; Kimball, r. 1822; Floyd, r. 1887; Alldredge, r. 2039; Barker, r. 1940; Okey, r. 1902; Brodie, r. 2021).

Appellants' insistence that the testimony of these witnesses varied in substantial respects from the official reports and statements previously made by the directors of the Authority is not supported by the record. The fact is that in all essential respects the testimony of the witnesses, both with respect to the design of the structures and the methods to be followed in their operation, was identical with the plans previously outlined in documents available to the complainants at the trial. The only variations involved matters of detail, such as the additional height of the Gilbertsville Dam, which could in no way affect the contentions of the parties (see infra pp. 256-258).

The objection that the witnesses testifying in regard to defendants' dam-construction program, plans and designs for dams, and methods of operation were incompetent to prove official action (assignment 58, r. 732; br. 246) is likewise without substance. As the trial court pointed out, these witnesses were the very men actively engaged in and in charge of the work and qualified by experience to testify on these matters (r. 1791, 2238). They were acting within the duties specifically and duly conferred upon them by board resolution (def. ex. 65, r. 4078). As appears from the record, the witness Woodward had been charged by board resolution with the duty of supervising and controlling the operation of all of the reservoirs (r. 1776; def. ex. 41, r. 4065), and the witness Bowman was directly in charge of the preparation of the plans and tentative figures upon which the design of the projects is based (r. 1717).

Complainants' objection that the witnesses could not testify to definite and final decisions arose not from the fact that the witnesses were not competent but from the fact that in the very nature of things they could testify only as to the present status of the Authority's dam-construction program. The position of complainants was that since the witnesses could not guarantee as definite and final the data they gave regarding the design and operation of dams not yet completed, the court should accept estimates and proposed plans stated in early published reports of the Authority, irrespective of the fact that it could be proved that such estimates and some details had been changed with continued investigations and studies. In other words, complainants insisted upon the right to challenge the legality of specified dams still in the exploratory and blueprint stage, but denied the right of the Authority to produce the only available evidence as to the existing status of the dams. The indefiniteness was inherent in the effort to litigate the validity of dams on which construction had not yet commenced and the preliminary plans of which had not yet been finally decided.

The objection to the evidence of the witness Sargent regarding the design and construction of the Sacandaga Reservoir in the State of New York (assignment 52, r. 730; br. 246) is also groundless. This testimony was offered and admitted for the purpose of showing the past experience of the witness Sargent in operating dams, in order to qualify him (r. 1674-

1680), and it was clearly proper and pertinent for this purpose.

11. THERE WAS NO REVERSIBLE ERROR IN THE COURT'S RUL-INGS AS TO THE SCOPE OF CROSS-EXAMINATION (assignments 3, 53-57).

Appellants' assignments of error on the rulings on cross-examination are of two types (br. 241-243):
(a) the ruling of the court that the cross-examination would not be limited to matters brought out on the examination in chief (assignments 3, 57, r. 716, 732; br. 241); and (b) the rulings of the court refusing to permit cross-examination of the Authority's witnesses regarding the testimony of other witnesses given in other cases or other proceedings (assignments 53-56, r. 730-732; br. 242).

(a) With respect to the scope of cross-examination of complainants' witnesses it should be noted that the assignments of error are much broader than the actual rulings of the court. It is true that the trial court did state in an oral opinion delivered from the bench that it would not limit cross-examination to matters brought out in chief "in view of the number of complainants, the number of witnesses, and the fact that the witnesses are drawn from widely scattered points from a number of several states" (r. 848). In this oral opinion the court pointed out:

A strict adherence to the rule [that cross-examination shall be limited] . . . without the qualifi-

cation laid down by the Supreme Court, would compel many witnesses to travel many miles for direct examination, and either to remain here in Chattanooga in attendance upon the trial for an uncertain number of days, or to come back again for the purpose of examination by opposing counsel. We believe that this decision which we have arrived at in the interests of economy and of the convenience of all parties and the witnesses, which will be carried out for the equal benefit of every litigant, lies within our sound discretion as defined by the Supreme Court of the United States [r. 848-849].

Counsel were informed that this ruling should not beregarded as a general ruling, but that specific objections should be made to each question which counsel
regarded as being beyond the proper scope of crossexamination (r. 779). This practice was consistently
followed throughout the trial. It should be further
noted that, with the exception of the cross-examination
on depositions, all the examination to which error is
assigned was directed to witnesses who were officials
of the complainant companies testifying in general
terms to the businesses and facilities of those companies and the alleged effect of the Authority's activities upon those businesses and facilities.

Furthermore, it is difficult to understand how appellants can claim any great prejudice from the position taken by the court with respect to cross-examination, since the benefits of these rulings were extended to both parties alike (r. 848). In fact, when the actual rulings are examined, it appears that prac-

tically all of the questions propounded on cross-examination to which complainants' objections were overruled were, in fact, related to the subject of the direct examination within the meaning of the decisions of the federal courts. For instance, in taking the depositions of certain officers of rural electric membership cooperatives the complainants identified and offered in evidence a large volume of documentary proof, including the charters and contracts of the membership corporations. It is clear that the purpose of the examination of these witnesses and the identification of these documents was to prove the theory of the complainants that these cooperatives were, in fact, organized by the Authority for the purpose of competing with the complainants in the rural areas, and that the cooperatives have no independent existence but are merely creatures of the Authority, operated and controlled by it. There is no other theory upon which this evidence, adduced upon direct examination, could be relevant to any of the issues in this case. The testimony brought out by defendants on cross-examination of these witnesses was purposely directed toward a rebuttal and explanation of the inferences which were inherent in the evidence developed upon direct examination (r. 1328-1347).

Even if it were true that the so-called strict federal rule limiting the scope of cross-examination to the subject-matter of the direct is to be applied rigidly in all classes of cases and with reference to all classes of testimony without any discretionary power in the trial courts, the decisions of the federal courts make it clear that the rule is not to be applied to prevent searching cross-examination with respect to all matters opened up on direct examination, and under the decisions such cross-examination may extend to details never specifically mentioned on direct so long as it appears that such subjects are related to the general subject-matter of the testimony in chief. It is well settled that where the testimony of a witness on direct examination tends to create an inference as to the existence of facts not directly testified to, cross-examination properly extends to any matters tending to rebut such inferences. Davis v. Coblens, 174 U.S. 719.54

Even if the record supported the proposition that the trial court consistently permitted the cross-examination of complainants' witnesses upon matters having no relation to the direct examination, such action would clearly not constitute reversible error under the decisions of this Court. The rule invoked by appellants is one of administrative convenience, designed to expedite the business of the court and to avoid the unnecessary confusion of issues. The decisions make it clear that where a rigid adherence to the rule would defeat rather than accomplish these purposes, it is sufficiently flexible to permit of an application which will avoid defeating the very purpose for which the rule was designed. The reasons stated by the trial court,

See also Meyer v. United States, 220 Fed. 822 (C.C.A. 5th, 1915); Hardy v. United States, 256 Fed. 284 (C.C.A. 5th, 1919); Resurrection Gold Min. Co. v. Fortune Gold Min. Co., 129 Fed. 668 (C.C.A. 8th, 1904); Commercial State Bank v. Moore, 227 Fed. 19 (C.C.A. 8th, 1915); Austin v. United States, 4 F. (2d) 774 (C.C.A. 9th, 1925); Minner v. United States, 57 F. (2d) 506 (C.C.A. 10th, 1932); Tinkoff v. United States, 26 F. (2d) 868 (C.C.A. 7th, 1936).

quoted above, were ample to support a relaxation of the rule in this case.

It would be difficult to conceive of a set of circumstances more clearly justifying the exercise of the discretion of the court. The wide latitude of that discretion was clearly stated by this Court in Wills v. Russell, 100 U.S. 621. In that case the appellant had assigned error to the rulings of the trial court overruling objections to questions propounded upon cross-examination. This Court conceded in the opinion that the particular cross-examination involved related to matters not covered by the direct examination but overruled the assignment, stating:

Cases not infrequently arise where the convenience of the witness or of the court or the party producing the witness will be promoted by a relaxation of the rule, to enable the witness to be discharged from further attendance; and if the court in such a case should refuse to enforce the rule, it clearly would not be a ground of error, unless it appeared that it worked serious injury to the opposite party [p. 626].

All of the rulings of the trial court upon this question are well within the rule of discretion as above stated and reiterated in *Davis* v. *Coblens*, supra, where this Court said:

The question of plaintiff's counsel was a general one and opened many things to particular inquiry. The extent and manner of that inquiry was necessarily within the discretion of the court, even

though it extended to matters not connected with the examination in chief [174 U.S. at 727].

The reasons for strict adherence to the limited rule of cross-examination in cases tried before a jury are scarcely applicable to a trial of an equity case before three experienced judges. As the presiding judge stated at the trial: "This court is capable of following the proof and sifting it out, and to decide what proof is offered by what party, and what constitutes the complainants' case, and what constitutes the defendants' case" (r. 1333).

The claim of appellants that they were seriously prejudiced by the rulings of the court upon cross-examination in that they were thus prevented from calling the directors or employees of the Authority as witnesses on their behalf (br. 242) cannot be taken seriously. The record shows that no effort was made to take the testimony of any of these witnesses either by deposition or by subpoena. In a trial before a court of this character there was no danger that appellants, if they had called adverse witnesses to the stand, would have been held responsible for or bound by the testimony of any such witness. There is no reason to believe that the appellants in such event would not have been permitted to show the hostility or bias of such witnesses and to cross-examine them, as well as to secure protection against broad cross-examination by defendants:

(b) The court ruled that it would not permit crossexamination of a witness on testimony of other witnesses in other litigation or proceedings (r. 1682) reparding the effect of a different project with which the witness on the stand was not familiar, or on the statement of other witnesses in the Ashwander case (r. 2252). These rulings are referred to on pages 242-243 of appellants' brief and are covered by assignments of error 53-56 (r. 730-732). The purpose of the rulings was obviously to prevent the introduction of extraneous hearsay. It should be noted that the court's ruling was not as broad as the partial excerpt from the record quoted in assignment 53 (r. 730) might indicate. None of the instances relied upon by appellants involved cross-examination on testimony of the same witness in any proceeding or on any testimony offered by the defense in this case even through other witnesses.

The attitude of the trial court in regard to such instances as those referred to in assignments 52, 54, and 55 (r. 730, 731) was summed up in the following statement:

The Court considers the injection into this record of testimony of a witness in another case, between different parties, as offering totally incompetent testimony, a different witness, not this witness [r. 1603].

That this position was within the line to of the trial court's discretion in a case of this character seems obvious. Cf. Western Union Tel. Co. v. Ammann, 296

Fed. 453 (C.C.A. 3d, 1924); Dupont de Nemours & Co. v. White, 8 F. (2d) 5 (C.C.A. 3d, 1925); note 82 A.L.R. 440.

12. THE LIMITATIONS ON REBUTTAL EVIDENCE WERE WITHIN THE TRIAL COURT'S DISCRETION (assignments 61, 62).

The appellants allege error in the exclusion of the testimony of certain witnesses offered on rebuttal (br. 243, 246). An examination of the whole record shows that complainants sought to withhold a part of their main case until the Government had rested and thus to deprive the Government of an opportunity to defend. The nature of the Authority's projects, their general method of operation, and their benefits to navigation and flood control on the Tennessee and Mississippi Rivers were fully set forth in the Authority's "Unified Report" in 1936 (comp. ex. 328 (original), r. 3068), in numerous congressional hearings, and in the Government's answer in this case. Much of the basic supporting data, including the reports of the Army Engineers on the Tennessee River (H.Doc. 328, 71st Cong., 2d sess. (comp. ex. 105 (original), r. 2615), and on Mississippi flood control (H.Doc. 259, 74th Cong., 1st sess. (def. ex. 32, r. 4062); Com. Doc. 1, H.R. Com. on Flood Control, 75th Cong., 1st sess.), were likewise available to complainants prior to the trial. As the trial court observed, there was little element of surprise in this case (r. 1861, 2372-2373). It is evident that the rebuttal testimony was not offered to contradict new and affirmative matter introduced in the defendants' case, but rather to reassert and amplify contentions which were made or should have been made in the case in chief or to contradict the admissions of complainants' own witnesses on cross-examination. The exclusion of such rebuttal testimony was entirely proper. Carver v. United States, 160 U.S. 553; Throckmorton v. Holt, 180 U.S. 552; Goldsby v. United States, 160 U.S. 70.

Only three issues raised by complainants' offers to prove on rebuttal deserve any attention: first, the offer to prove (r. 2348) that the Mississippi levees could be raised and that the Authority's reservoirs would not appreciably reduce Mississippi flood heights; secondly, the offers to prove (r. 2356, 2378, 2410) that the Authority's method of operation was for power and not for flood control; and finally, the offer to prove (r. 2309, 2349) that any increase in low-water stream flow provided by the Authority's projects would be of no value to Mississippi navigation.

The court properly excluded the testimony offered on rebuttal with respect to Mississippi flood control. As part of complainants' case in chief the witness Kelly testified on this subject at great length and sought to show (a) that the existing protection works for Mississippi flood control were adequate without the addition of the projects of the Authority, and (b) that no tributary flood-control reservoirs, whether those of the Authority on the Tennessee or any others, would have an appreciable effect in the reduction of Mississippi flood heights (r. 1370, 1374-1375). This is the position

which appellants now take in their brief (br. 58-59). On cross-examination, however, the witness Kelly expressly acceded to the views set forth in the report of the Chief of Army Engineers following the great flood of 1937 (see supra pp. 20-21) to the effect that the existing Mississippi flood-control protection works were inadequate for the greatest Mississippi floods, that the levees had reached the limits of practicable height, and that additional protection should be sought in part in the construction of reservoirs on the tributaries (Kelly, r. 1379-1380). Thus the testimony offered with respect to the feasibility of raising the levee system not only dealt with the same subject already discussed in the testimony of the witness Kelly on direct examination in their case in chief, but was in fact offered to rebut the admissions of Kelly on cross-examination.

There was even less justification for the offer of rebuttal testimony on the effect of the Authority's projects in reducing Mississippi flood heights. The pretext advanced at the trial was that the preliminary design of the Gilbertsville Dam had been changed subsequent to the last congressional appropriation hearings so as to provide more flood storage (r. 2340-2341). The offer of the Authority's counsel to withdraw any objection to rebuttal testimony limited to the effect of the additional storage at Gilbertsville was unsatisfactory to complainants' counsel (r. 2341). In fact, the change in preliminary design did not materially affect the issue. As we have said, Kelly's previous testimony on direct examination in complainants' case in

chief was based on the impracticability of reservoirs for flood control in principle, and the testimony was not in any way affected by the precise amount of storage space available at the particular projects of the Authority, which was well known to be substantial. The Government's principal witness on Mississippi flood control, Clemens, based his conclusions on the figures of flood storage set forth in congressional hearings available to the complainants (r. 1651). Here again the offer of rebuttal testimony was in truth for the purpose of rebutting the admissions of complainants' witness Kelly on cross-examination.

The court's ruling rejecting rebuttal testimony on the propriety of the Authority's method of operation was equally sound. The Authority's general method of operation, the seasonal filling of the tributary projects during flood season, and the drawdown in advance of floods on the main-stream projects, was set forth in the Authority's "Unified Report" (comp. ex. 328 (original) pp. 18, 19, r. 3068). Complainants' pretext in justification of the rebuttal testimony (r. 2344) was that the details of the method of operation of the Norris Dam as testified to by the defendants' witness Woodward (r. 1820-1821) differed in some degree from those tentatively given in a previous congressional hearing (comp. ex. 116 (original) pp. 374-375, r. 2700). difference in detail, however, was wholly immaterial so far as the complainants' case was concerned. plainants' witness Kurtz had testified on direct examination in the case in chief that there was a conflict in

the use of a reservoir for power and flood control and that to whatever extent a reservoir were used for power, it would have no dependable value for flood control, and conversely (Kurtz, r. 1213).

It is this alleged conflict in principle which complainants now advance as their principal reliance (br. This alleged principle would apply equally whether the Norris Dam were to be filled to elevation 1010 on April 1 (as was stated in one congressional hearing (comp. ex. 116 (original) pp. 374-375, r. 2700)), or only to elevation 1005 on April 15 (as testified to in this trial, r. 1820-1821). This change in detail was the result of further studies, and further studies will undoubtedly produce other changes in detail (fdg. 44, r. 608, app. I, 30). But the principle of operation of the same storage capacity for multiple purposes remains the same, and it is this issue (and not the details) which appellants discuss at such length in their brief. This is obvious from the fact that appellants contend that the alleged conflict has application not merely to the Norris Dam (the only dam as to which detailed testimony was given) but to all the other dams as well (br. 50-51). In fact, the true purpose of the offer of rebuttal on this issue was that, on cross-examination, complainants' witness Kelly admitted (r. 1386-1387) that for Mississippi flood control the dams beyond prediction distance (like the tributary projects) should be operated so as to store water throughout each flood season (as the Authority plans to do) and that the main-stream dams within

prediction distance may be drawn down in advance of food peaks and additional capacity made available to reduce the crest (as the Authority also plans to do).

The question of the value of the increased stream flow in low-water season for Mississippi navigation was likewise raised by complainants in their case in chief. The complainants' witness Putnam expressly testified on direct examination that, in his opinion, any increase in low-water flow provided by the Authority's projects would be of no value to Mississippi navigation, although he advanced no detailed justification for this opinion (r. 1168). On rebuttal complainants offered to prove that the witness Putnam was "still of the same opinion" (r. 2309-2310). The first time that complainants offered any evidence in support of this opinion was on rebuttal (r. 2355-2356). This evidence was available to complainants in advance of the trial and did not in any way turn on the details of the defendants' testimony. It is obvious that complainants cannot be permitted to withhold part of their case in chief for rebuttal.

All of the remaining testimony offered in rebuttal concerned matters of detail regarding which there was conflicting opinion. For example, the witness Putnam in rebuttal offered testimony which was merely supplementary to his testimony in the case in chief in which he had given a detailed comparison of the relative merits of the low-dam and the high-dam plans, and detailed estimates of the prospective traffic on the improved waterway. He had covered the

watkins, Alldredge, Barker, and Brodie had disagreed with him (Putnam, r. 1152-1170, 1176-1178; cf. r. 2286-2308, 2320-2330; Watkins, r. 1536-1538, 1549-1551; Alldredge, r. 2055-2063; Barker, r. 1959-1973; Brodie, r. 2023-2031). As ruled by the court, certainly the proffered testimony could not properly be received in rebuttal (r. 2288-2289, 2295-2296). The exclusion of such evidence lies within the discretion of the trial court. Johnston v. Jones, 66 U.S. 209; Marande v. Texas & P. Ry.Co., 124 Fed. 42 (C.C.A. 2d, 1903); Stone v. Chicago, M., St.P. & P.R.Co., 53 F. (2d) 813 (C.C.A. 8th, 1931). As this Court ruled in the case of Philadelphia & Trenton R.R.Co. v. Stimson, 14 Pet. 448, concerning the proper order of proof,

The mode of conducting trials, the order of introducing evidence, and the times when it is to be introduced, are, properly, matters belonging to the practice of the circuit courts, with which this court ought not to interfere . . [p. 463].

The present case demonstrates the wisdom of this policy, for without such a power vested in the trial court there would have been no end to the multiplication of minutiae.

For all of the foregoing reasons, the decree of the curt below should be affirmed.

Respectfully submitted,

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